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ABSTRACT

A guide is presented for educators, parents, and students to help students prepare for college admissions tests: American College Testing (ACT) programs, Scholastic Aptitude Test (SAT), and Preliminary Scholastic Aptitude Test (PSAT). Information is provided on the content of the tests and the services and publications available from the ACT program and the College Board; and effective methods for informing parents and students about the tests and registration requirements. In addition to descriptions of each test, information is provided on how the results of each test can be utilized by students and school staff in identifying academic needs. The contents of public and private test preparation programs in Colorado are also described. Additional contents include: suggestions for organizing a 2-week workshop program to familiarize students with the contents of the college admissions tests; information on general principles for preparing and taking admissions tests as well as some specific strategies for the verbal, language, mathematical, and reading portions of the tests; information on the major text, computer, and video materials available to help students; and a review of research on the effects of coaching and preparation programs on test results. (SW)

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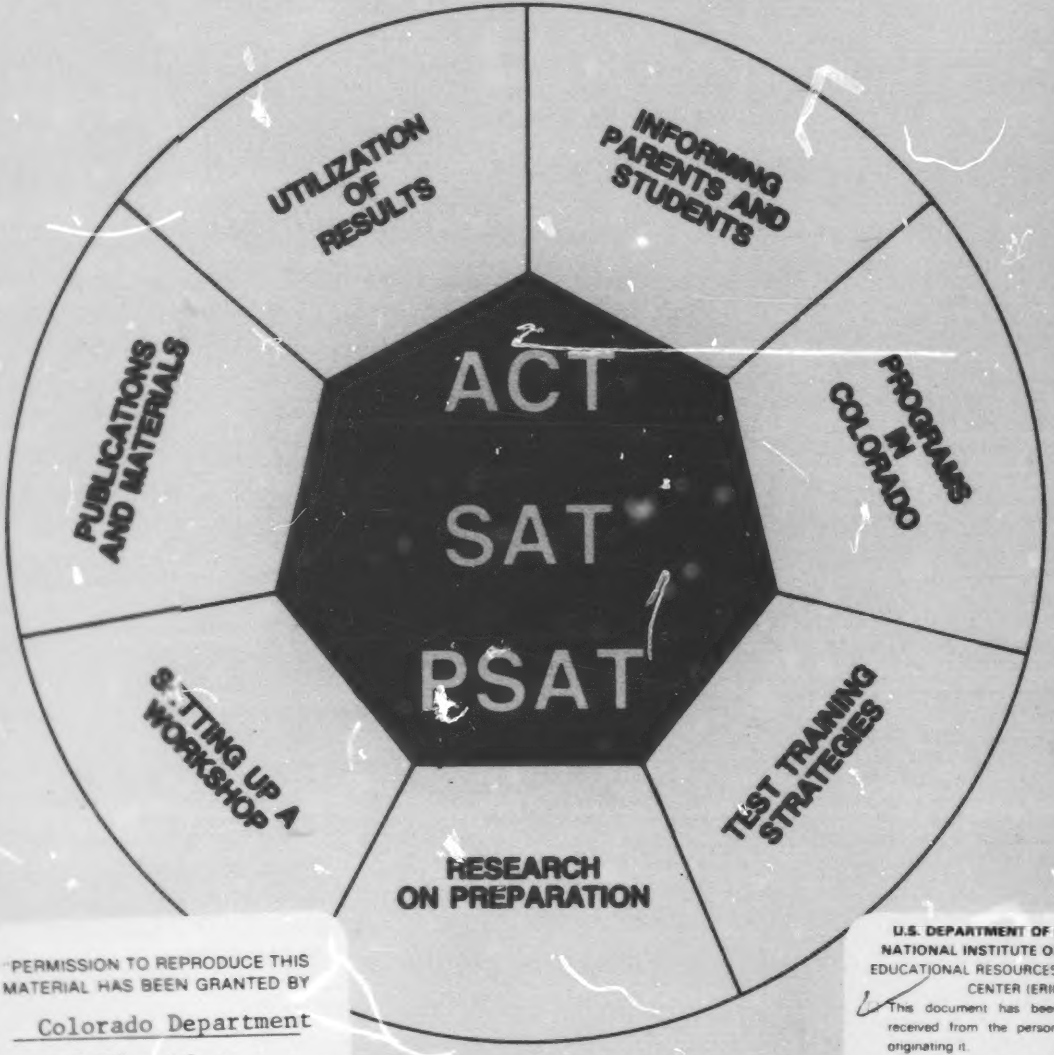
SOURCE BOOK ON PREPARING FOR COLLEGE ADMISSIONS TESTS


ACT
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UTILIZATION OF RESULTS
INFORMING PARENTS AND STUDENTS
PROGRAMS IN COLORADO
TEST TRAINING STRATEGIES
RESEARCH ON PREPARATION
SETTING UP A WORKSHOP
PUBLICATIONS AND MATERIALS

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COLORADO DEPARTMENT OF EDUCATION
CALVIN M. FRAZIER, COMMISSIONER
DENVER, 1983

SOURCE BOOK ON PREPARATION FOR COLLEGE ADMISSIONS TESTS: ACT · PSAT · SAT

Prepared by

Richard Hulsart

SCHOOL IMPROVEMENT & LEADERSHIP SERVICES UNIT

Eugene R. Howard, Director

OFFICE OF FIELD SERVICES

Roy G. Brubacher, Assistant Commissioner

COLORADO DEPARTMENT OF EDUCATION

Calvin M. Frazier, Commissioner of Education
Denver, Colorado 80203
March 1983

This Sourcebook has been developed to provide educators in Colorado with information about materials and approaches that can assist students in preparing for college admissions tests (ACT · PSAT · SAT). The Sourcebook also provides information on methods for keeping parents and students informed about admissions tests, the evaluation of test results, public and commercial test preparation programs in Colorado and research related to the effects of preparing for college admissions tests.

Price $3.50

One copy was sent to each district and high school at no charge. Additional copies may be ordered from:

Colorado Department of Education
School Improvement and Leadership Services Unit
201 E. Colfax
Denver, CO. 80203

ACKNOWLEDGEMENTS

The enclosed Sourcebook represents a collection of information from many sources. The State Department of Education would like to thank the following people for assistance in preparing the Sourcebook:

- The schools and test preparation services who provided details about their preparation programs.
- Mildred Gamble, Robert Hannum, Linda Molner, Janet Zamboni, Ceel Kenney, and Diane Shames who contributed information that was extremely valuable in describing test taking strategies.
- Members of the Review Committee who provided valuable guidance in completing the final draft of the Sourcebook.

My special appreciation goes to Mildred Gamble for her invaluable assistance in proofreading and editing the manuscript and to Esther Sullivan for her patience and endurance in typing and proofreading several versions of the Sourcebook.

Richard Hulsart
School Improvement/Leadership Services Unit
Colorado Department of Education
February, 1983

cde

COLORADO DEPARTMENT OF EDUCATION
State Office Building, 201 E. Colfax
Denver, Colorado 80203
Telephone (303) 866-2212

Calvin M. Frazier, Commissioner of Education

Dear

The Colorado State Department of Education is very concerned that high school students in Colorado have equal access to information about the purposes, content, registration requirements and methods of preparing for college admissions tests. In order to address the issue of equal access, the Department has developed the attached sourcebook to provide educators in Colorado with detailed information about approaches and materials that can assist students in preparing for the ACT, SAT, and PSAT examinations.

The Sourcebook has been printed in an unbound version so that pages can be removed for purposes of reprinting or up-dating. The Sourcebook is quite comprehensive, and the following information is offered as a general guide to some of the areas covered in the Sourcebook.

- The first two chapters in the Sourcebook cover the tests and publications provided by the ACT Assessment Program and the College Board. Both organizations are excellent sources of inexpensive materials that can be used in helping students prepare for college admissions exams and interpret the results of such exams.

- One of the major factors in maintaining a successful preparation program is keeping parents and students informed about the purposes and contents of tests, the dates and locations of the tests, the academic preparation necessary for the tests, and the meaning of the results. The third chapter provides suggestions for communicating this information.

- It is possible to use the college admissions test results to identify the academic needs of individual students in areas such as mathematics, reading and English. The test results can also be utilized in evaluating the overall program of a school in these areas. The fourth chapter provides suggestions on how various test analyses can be accomplished, including descriptions of some new test reporting services offered by ACT and the College Board.

- Educators who have set up programs and have utilized test preparation materials with students are excellent sources of information about test preparation programs. In Chapter 5 are descriptions of various public and private programs around the state. The people in these programs are willing to share their knowledge and experience with others.

- Chapter 6 outlines a sample two week preparation workshop. While a two-week workshop cannot correct academic deficiencies, it can be valuable in exposing students to the types of questions found on the tests, helping students review various principles in the academic areas covered by the tests, and suggesting some general test taking strategies. These experiences can help reduce test taking anxiety and provide the opportunity for students to do their best on the tests.

- Chapter 7 in the Sourcebook provides detailed suggestions on how to prepare for college admissions tests. These suggestions represent the collective experience of a number of educators who have spent considerable time preparing students. The section on General Test Taking Principles outlines the steps that a student should take in general preparation. The other sections in the chapter address specific areas of the ACT and SAT tests, and are of value to both educators and students interested in specific test taking strategies.

- Chapter 8 provides information on materials (text, workbook, computer, film video) available to assist students in preparing for college admissions tests. The question may be raised, "Why doesn't the Sourcebook indicate which materials are best to use in a preparation program rather than just describing the materials available?" While I have personally reviewed numerous materials in the preparation of the Sourcebook, I have not had the opportunity to use them in a classroom setting. Perhaps the best evidence of quality is successful use with students. Therefore, in terms of the selection process I suggest contacting schools with existing programs to obtain information on actual experience with the materials, or obtaining examination materials from publishers and reviewing the contents to see if they are appropriate. The materials described in the chapter are produced by reputable educational publishers, who are usually willing to provide copies of materials for examination. In addition, while the prices of single copies are quoted in Sourcebook, almost all publishers offer considerable discounts for educational institutions ordering in quantity.

- There is considerable evidence that careful preparation can make a difference in test scores. Although there is considerable debate over how much scores can be raised by preparation activities, Chapter 9 outlines for the reader the major research studies that can provides further information on the impact of coaching.

In the preparation of the Sourcebook the State Department has collected considerable literature on the subject of college admissions testing. We would be glad to share these articles, publications, and research reports with interested educators. If there are questions concerning the contents of the Sourcebook, please contact me at 866-2417.

Sincerely,

Richard Hulsart
Consultant, External Testing
School Improvement/Leadership Services Unit
303-866-2417

RH/s

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II. THE COLLEGE BOARD TESTS AND PUBLICATIONS

III. KEEPING PARENTS AND STUDENTS INFORMED ABOUT COLLEGE ADMISSIONS TESTS

IV. UTILIZATION OF COLLEGE ADMISSIONS TEST RESULTS

V. TEST PREPARATION PROGRAMS IN COLORADO

VI. SETTING UP A TEST PREPARATION WORKSHOP

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INTRODUCTION

Most of the four year colleges and universities in the United States require that candidates applying for admissions take either the American College Test (ACT) or the Scholastic Aptitude Test (SAT). During the 1981-82 school year, approximately 25,000 Colorado high school students participated in the American College Testing Program (ACT), and 14,000 students took the Preliminary Scholastic Aptitude Test (PSAT). Another 6,000 high school graduates of the class of 1982 took the Scholastic Aptitude Test (SAT) while in high school.

For these students, as well as for the students who have taken these tests in the past or will take them in the future, the college admissions exams are important - so important that the results of the tests often help to determine the future directions of students in terms of both education and career development. While the results of admissions tests are only one of several factors that college admissions officers consider during the admission process, lack of knowledge about the nature of the exams or the failure to be properly prepared for the exams can result in the loss of choice of college or specific department. There are also the missed opportunities for advanced education for students who did not take the exams due to a lack of awareness about admission and registration requirements or a lack of confidence in their ability to take tests.

Due to the importance of these tests, the State Department of Education is very concerned that students in Colorado have equal access to information about the purposes, content, registration requirements, and methods of preparation for the college admissions tests. In order to address the issue of equal access, the Department has developed this sourcebook which is designed to provide educators in Colorado with detailed information about approaches and materials that can assist students in preparing for the college admissions tests. In addition, there are suggestions in the sourcebook for ways that school personnel can keep both parents and students informed about admissions tests and ways that school personnel and students can utilize the test results in identifying academic strengths and needs.

The Department of Education fully supports the concept that a strong academic program and counseling efforts to guide students toward needed courses are the most critical elements in preparing students for any tests, including the college admissions exams. At the same time, the Department recognizes that in many situations information about the contents of tests, test taking strategies, and a review of basic academic concepts covered by admissions tests can be helpful in preparing students for these tests. In addition, preparation for college admissions tests may involve the development of reasoning skills that are valuable in future educational or vocational pursuits. Of course, the extent and nature of any preparation program depends on consideration of factors such as the structure of the existing academic program; the nature of the school population; and the attitudes of school staff, students, and parents toward preparation programs.

From the growth of commercial test preparation services it might appear that an adequate preparation program requires a substantial investment of both money and time on the part of the student. However, a careful examination of the contents of the sourcebook reveals that there are preparation programs in various parts of the state that are being conducted with a minimum of expense to the students and are being held at times that do not interfere with the students' normal school activities. Most of these programs develop their own materials or obtain low cost materials for students.

The information in the sourcebook is presented in a descriptive rather than evaluative format. While the sourcebook provides considerable information about existing programs and materials, the potential value of these programs and materials for a particular school or student has to be determined through a careful examination of various materials or approaches by the person or persons utilizing the information.

Following is a description of the various sections in the sourcebook with a brief commentary about content:

I. THE ACT ASSESSMENT PROGRAM AND PUBLICATIONS

This section provides information on the content of the ACT tests and describes the services and publications available from the American College Testing Program.

II. THE COLLEGE BOARD TESTS AND PUBLICATIONS

This section provides information on the content of the PSAT and SAT tests and describes the services and publications available from the College Board.

III. KEEPING PARENTS AND STUDENTS INFORMED ABOUT COLLEGE ADMISSIONS TESTS

This section outlines activities that have been found valuable in informing parents and students about the registration requirements and the nature and uses of the tests.

IV. UTILIZATION OF COLLEGE AND ADMISSIONS TEST RESULTS

For each of the college admissions tests, there is a description of how the results of that particular test can be utilized by both the students and the school staff in identifying academic needs.

V. TEST PREPARATION PROGRAMS IN COLORADO

This section briefly describes the contents of various test preparation programs provided for students in Colorado by schools, community organizations, and commercial testing services.

VI. SETTING UP A TEST PREPARATION WORKSHOP

This section provides suggestions for organizing a two-week workshop program to familiarize students with the contents of the College Admissions Tests and to review some major concepts and test taking strategies.

VII. PREPARING FOR AND TAKING COLLEGE ADMISSIONS TESTS

This section provides the reader with some general principles for preparing and taking admissions tests as well as some specific strategies for the verbal, language, mathematical, and reading portions of the PSAT, ACT, and SAT.

VIII. TEST PREPARATION MATERIALS

This section covers the major text, computer, and video materials that are available to assist students in their preparation for admissions tests.

IX. RESEARCH ON THE EFFECTS OF PREPARING FOR COLLEGE ADMISSIONS TESTS

This section provides information on some of the major studies on the effects of coaching and preparation programs on test results.

I. THE ACT ASSESSMENT PROGRAM AND PUBLICATIONS

I. THE ACT ASSESSMENT PROGRAM AND PUBLICATIONS

The American College Testing Program (ACT) is an independent, non-profit education service organization. The Central Office of the ACT Program is located in Iowa City, Iowa; however, there is a regional office located at the following address:

The ACT Program
1307 West 4th Avenue
Broomfield, Colorado 80029
Contact: Dr. Marcus Ruger, Regional Director
Phone: 469-4464

The ACT Program is a comprehensive system of data collection, processing and reporting, designed to help students, with the assistance of high school counselors, develop postsecondary plans.

The ACT Assessment instrument consists of the Student Profile Section and the ACT Interest Inventory, which students complete when they register for the Assessment, and the four timed tests of educational development taken at a test center under standardized conditions. The tests of educational development in English, mathematics, social studies, and natural sciences emphasize problem-solving and reasoning abilities rather than the rote recall of facts. The basic test fee is approximately $9.50. The Student Profile Section collects biographical data and information about the student's postsecondary plans, special academic and out-of-class achievements, aspirations, and high school coursework. The Interest Inventory measures six interest dimensions: Science, Creative Arts, Social Service, Business Contact, Business Detail, and Technical. In addition, research services are provided to high schools and colleges for better use of the ACT assessment information.

Other programs and services that ACT administers include the Career Planning Program and Student Need Analysis and Evaluation/Survey Services. ACT produces numerous publications related to guidance and testing. Information on services and a catalog of ACT publications can be obtained by contacting the Broomfield Regional Office. The following information describes the four timed tests of educational development:

ENGLISH USAGE TEST (75 items, 40 minutes). This test measures understanding of the conventions of standard written English and the use of the basic elements of effective expository writing: punctuation, grammar, sentence structure, diction, style, logic, and organization. The test does not measure memory of rules of grammer, but stresses the analysis of effective expression.

MATHEMATICS USAGE TEST (40 items, 50 minutes). This test measures mathematical reasoning ability. The test emphasizes quantitative reasoning, rather than memorization of formulas, knowledge of techniques, or computational skill. The test involves the solution of practical quantitative problems and includes a sampling of mathematical techniques covered in high school courses.

SOCIAL STUDIES READING TEST (52 items, 35 minutes). This test measures skills necessary for the understanding of social studies material as well as the ability to apply knowledge that has been learned in social studies courses at the high school level. The test assesses reading comprehension skills and the ability to draw inferences and conclusions, to examine the interrelationships and import of ideas, to extend given concepts to new situations, to make deductions from experimental or graphic data, and to recognize a writer's bias, style, and mode of reasoning.

NATURAL SCIENCES READING TEST (50 items, 35 minutes). This test measures skills necessary for the understanding of natural science material as well as knowledge that has been gained in natural science courses at the high school level. The test involves a variety of scientific topics and problems, including descriptions of experiments and discussions of scientific theory. The test assesses the ability to understand and distinguish among the purposes of experiments, to examine the logical relationships between experimental hypotheses and the generalizations that can be drawn from experiments, to predict the effects of ideas on new situations, to propose alternate ways to conduct experiments, and to judge the practical value of the ideas and theories presented.

The ACT publications associated with the tests are described below:

Taking the ACT Assessment. This publication includes information on how the results of the ACT test are used, instructions for registering for the ACT, suggestions for preparing for the assessment, instructions for completing the ACT Interest Inventory and Student Profile Section, information on test dates and location of test centers, and sample questions from the ACT Assessment. (Free)

Using Your ACT Assessment Results. Each student who takes the ACT Assessment receives a Student Profile Report (SPR). This guide helps the student interpret the information on the SPR and suggest ways to use ACT assessment results in making career plans. (Free)

The ACT Assessment Counselor's Handbook. The handbook contains descriptions and samples of ACT's High School Report, College Report, Student Report, High School Label, High School List Report, and other basic information counselors need to help students use the ACT Assessment in making educational and career plans. The handbook also describes the High School Profile Service, the Educational Opportunity Service, and other services offered by ACT. (Free)

Using the ACT Assessment on Campus. This publication contains suggestions for using ACT assessment results in postsecondary admissions, course selection, placement, and counseling. A model **ACT College Report** is interpreted in detail. Information about ACT Assessment reporting and research service is provided. (Free)

The College Planning Search Book. This book, providing detailed information about more than 3,000 colleges, is organized in a way that helps students locate programs suited to their needs and to their interests. The Search Book shows students what to look for in a college and how to investigate and compare alternatives. ($6.00)

II. THE COLLEGE BOARD TESTS AND PUBLICATIONS

II. THE COLLEGE BOARD TESTS AND PUBLICATIONS

The College Board is a national, nonprofit association with a membership of 2,500 colleges and universities, secondary schools, and education associations and agencies. The College Board's main office is located in New York City. A local office is located in Denver at the following address:

The College Board
4155 E. Jewell Ave. Suite 705
Denver, Colorado 80222
Contact: Mr. Edward Tibby, Associate Director
Phone: 759-1800

The College Board, which sponsors several guidance, testing, credit, placement and financial programs, produces numerous publications related to these programs. A list of the College Board publications can be obtained by writing or telephoning the Denver Office.

This sourcebook is primarily concerned with programs and materials that help prepare students for two tests offered through the Admissions Testing Program (ATP) of the College Board: the PSAT/NMSQT and the SAT. The following information describes these two tests and some of the publications associated with them and also lists the subject areas in which students can take achievement tests.

PSAT/NMSQT: Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test

The PSAT/NMSQT is a multiple-choice test that measures developed verbal and mathematical reasoning abilities. A shortened version of the Scholastic Aptitude Test (SAT), it represents a preview of the SAT, which is required for admission to many colleges. By taking the test in their sophomore or junior years, students find out how they compare with other sophomores or juniors who have taken the test and gain insight into how they may perform on the SAT.

The PSAT/NMSQT consists of a verbal section of 65 questions and a mathematical section of 50 questions. This test takes a total of 1 hour, 50 minutes. The Verbal Ability sections of the PSAT/NMSQT consist of four types of questions: anotonym, analogy, sentence completion, and reading comprehension, the Mathematical Ability sections consist of two basic types of questions: regular math usage items and quantitative comparisons. (For a more detailed description of the content of these questions see the descriptions for the Verbal and Mathematical sections of the SAT on the subsequent pages).

Both the Verbal and Mathematical sections of the PSAT/NMSQT generate a scaled score that ranges from 20 to 80. Scores and other requested information are sent to the respective students schools. Some secondary schools include the PSAT/NMSQT scores on student transcripts that are sent to colleges. The PSAT/NMSQT is administered annually in October. The 1982 fee was $4.25 per student.

Students who take the PSAT can request consideration for participation in competition for college scholarships offered by the National Merit Scholarship Corporation (NMSC) and the National Achievement Scholarship Program for Outstanding Negro Students as well as other sponsored scholarship programs. The College Board will make special testing arrangements for handicapped students. Details about special programs are available from the Denver office.

Individual student reports, as well as school summary data, are reported to the schools six to eight weeks after the test date. Scores are also sent to the National Merit Scholarship Corporation and other programs authorized by students. Students receive a Report of Student Answers containing their scores and responses to each question. Test booklets are returned to students at the same time.

PSAT/NMSQT: Publications

The **PSAT/NMSQT Student Bulletin** provides the student with procedures for registering for the PSAT/NMSQT, information on taking the test, a full-length sample test, and details on scoring and reporting of results.(Free)

A Counselor's Guide to Helping Students Learn from the PSAT/NMSQT enables counselors to assist students in more clearly grasping the general nature of the tests and implications of the test results. (Free)

About Your PSAT/NMSQT Scores gives students information on interpreting PSAT/NMSQT results and on general college planning. (Free)

(SAT): Scholastic Aptitude Test

The SAT is a multiple-choice test made up of four separately timed verbal and mathematical sections. The two Verbal Ability sections of the SAT consist of four types of questions: antonym and analogy (which combined give a vocabulary subscore), and sentence completion and reading comprehension (which combined give a reading subscore). Each verbal section is 30 minutes in length, one containing 40 questions, the other 45 questions. The total of the two sections generates a scaled Verbal Ability score that ranges from 200 to 800. Following is a brief description of the intent of each type of question in the Verbal Ability section:

Antonym items test the ability of students to understand the meanings of words and to distinguish between fine shades of meaning.

Analogy items test the ability of students to understand logical relationships between pairs of words.

Sentence Comprehension items test the ability of students to complete sentences with a word or words that retain the meaning of the sentence and are structurally and stylistically correct.

Reading Comprehension items test the ability of students to understand, interpret, and analyze reading passages on a variety of topics.

The two Mathematical Ability sections of the SAT consist of regular math usage questions and quantitative comparisons. The Math Usage section tests the ability of students to solve mathematical problems involving arithmetic, algebra, and geometry by using problem solving techniques, logic, and application of basic skills. The Quantitative Comparison section tests the ability of students to use mathematical insight, approximation, and simple calculations to compare two given quantities. Each math section is 30 minutes in length, one containing 25 questions, the other 35 questions. The total of the two sections generates a scaled Mathematical Ability score that ranges from 200 to 800.

The Test of Standard Written English (TSWE) is a supplement to the SAT that consists of two types of questions: English Usage and Sentence Completion. Both types of questions measure the ability of students to recognize standard written English. The TSWE is 30 minutes in length and contains 50 to 58 questions. It is scored separately from the SAT on a scale of 20 to 60+.

There is also a section of experimental questions on the SAT test. However, these are used only for pre-testing and do not count toward a score.

Approximately six weeks after the SAT test, the student receives a report that includes scores and percentile ranks. With this report the student receives a booklet, **Your Score Report,** which helps the student interpret and understand the scores, percentile ranks, and other information on the report. The booklet also explains how colleges use the scores. In addition, for a fee of $6.50, the student may request the SAT Questions-and-Answer-Service which provides the following information:

- The questions on which the student's ACT scores are based
- A list of correct answers
- A copy of the student's answer sheet
- Raw scores, tables and directions used to place these scores on the College Board scale

SAT Publications:

Taking the SAT - provides the student with information about the contents of the SAT and the TSWE, preparation for these test, scoring of the tests, and obtaining **Your Score Report** and the SAT Question-and-Answer Service. In addition there is a complete sample test with directions and scoring key. (Free)

Your Score Report - contains information to help students understand and interpret the scores on the SAT and the College Board Achievement Tests. (Free)

Six-SAT's - contains six editions of the SAT that were administered during the 1981-82 academic year. ($6.00)

ATP Guide for High Schools and Colleges - provides additional information on the Admissions Testing Program, understanding College Board scores, using an individual ATP Score Report, and using the ATP reports with groups of students. (Free)

The SAT: A College Board Presentation on Taking the Scholastic Aptitude Test -provides a boxed set of slides or a filmstrip/-cassette setup introducing students and parents to the SAT. This presentation includes questions from the SAT and TSWE, an explanation of what these tests measure, and why and how they are scored. ($23-25)

An SAT: Test and Technical Data - describes the purpose of the SAT, its specifications, how various editions are developed, procedures used to equate the editions to each other, and technical data on a recent edition.

ACH: Achievement Tests

The Admission Testing Program (ATP) also offers fourteen different achievement tests, each of which measures knowledge in a particular subject and the ability to apply that knowledge. The fourteen tests offered are as follows:

ENGLISH:
English Composition (with and without essay)
Literature

HISTORY AND SOCIAL STUDIES:
American History and Social Studies
European History and World Culture

SCIENCES:
Biology
Chemistry
Physics

MATHEMATICS:
Mathematics Level 1
Mathematics Level 2

FOREIGN LANGUAGES:
French
German
Hebrew
Latin
Latin
Spanish

Colleges that require achievement tests of their applicants use the scores for admission and course placement. Some colleges specify which tests they require, while others allow students to choose the ones they will take. Students need to check with their counselors regarding college requirements and test registration.

III. KEEPING PARENTS AND STUDENTS INFORMED ABOUT COLLEGE ADMISSIONS TESTS

III. KEEPING PARENTS AND STUDENTS INFORMED

While the American College Testing Program and the College Board provide numerous publications concerning the purposes, contents, and registration for the ACT and SAT tests, it is the responsibility of school personnel to keep parents and students informed about curricular choices, test-preparation materials and programs, test dates and fees, and other issues important to college-bound students. A broad, up-to-date information base helps teachers, counselors, parents, and students to become an effective student advocacy team.

On the following pages are some activities that have been found valuable in keeping parents and students informed.

* School counselors should be well informed about the purposes, content, and registration requirements for the ACT, PSAT and SAT tests, and should share this information during individual and group counseling sessions with students. George McCulloch, principal of Northglenn High School in Denver, has indicated that Northglenn's counselors are involved in the following activities related to test preparation:

  ° Counseling students on which courses will best prepare them for college and the college entrance exams, and encouraging those students likely to take the tests to take a college preparatory schedule of courses.

  ° Encouraging students to take the PSAT and providing opportunities for students to take the PSAT for "practice."

  ° Informing students of the test preparation materials available and making these materials available to the students on a loan basis.

  ° Conducting classroom presentations on test awareness which provide students with information about registration requirements and the basic purposes and content of the tests.

  ° Keeping the students informed about any tutorial programs or review sessions designed to prepare students for the ACT or SAT tests.

Littleton High School in Littleton, Colorado has a well developed program for keeping parents and students aware of the requirements for college admissions and Ruth Falkenstein, a guidance counselor at Littleton High School, was extremely helpful in the development of the following list of activities:

* Periodic flyer can be provided for students and parents announcing the dates of test orientation programs, college nights, test dates and deadlines. It is a good idea to print critical points and dates in bold red letters so that the information stands out from the many other flyers and notices that are distributed early in the year.

* A newsletter can be sent periodically to parents outlining any courses available during the year to assist students in preparing for tests and describing guidance services available to help the student with college admissions. As part of the newsletter, the following summaries are valuable in keeping parents and students informed about dates and requirements.

  ° A Calendar for College Planning - outlines critical dates (college night programs, financial aid workshops, college visitations, college planning sessions, and dates of tests).

  ° General Recommendations for College Admissions - outlines basic requirements for college and universities (basic academic courses, class rank, entrance tests, and recommendations).

  ° College Night Information - outlines information about major colleges and universities (size of city, enrollment, tests required, aid forms required, and areas of concentration).

* Memos can be sent to students and parents just before test dates, outlining purposes of tests, requirements for registration, and dates and times of administration. It is also helpful to remind students of some basic preparation approaches (e.g., getting a good nights sleep and bringing necessary materials to test site).

* Students can design posters for placement in the main hall of the school announcing upcoming ACT and SAT test dates. Posters are also available from the College Board and ACT.

* Orientation sessions for both students and parents can be held at strategic times during the year to provide information about purposes of tests, registration requirements, methods of preparation, test preparation courses available, and how test results are used. There are audio/visual materials available from the College Board and American College Testing program to help in this process.

* Information related to college admissions and test taking can be published in the school newspaper. This presents an opportunity for students to express their concerns about college admissions and test taking.

* Spot announcements on local radio and T.V. stations are effective methods of reminding parents and students about test dates. Panel presentations on radio and T.V. concerning admission requirements can be valuable in airing issues and providing information about college entrance requirements.

* The people responsible for notifying parents and students should also keep the Board of Education and District Accountability Committees notified about orientations and programs related to admissions requirements. It is always good public relations to keep these boards and committees aware of successes in keeping parents and students informed as well as positive testing outcomes as a result of the school's efforts.

* Parent and community organizations that are involved with school activities are excellent sources for the distribution of materials about preparing for college admissions. These organizations often publish their own newsletters and are very interested in including articles informing parents about the requirements for college admissions.

Following are examples of handbooks and pamphlets that have been distributed as part of an overall advisement effort in various school systems:

* The Jefferson County Parent-Teacher-Student Association and the Jefferson County R-1 Department of Guidance and Counseling jointly publish a booklet entitled **High School and Beyond.** This booklet is distributed to all 8th graders in the county and provides extensive information for both parents and students on both educational and career planning. In a section on Planning for High Schools there are a number of references to the admissions tests including descriptions of the tests and information on when to take the tests. There is also an entire section on Career Planning-College which discusses in detail college requirements.

* The Cherry Creek High School Counseling Department publishes a booklett entitled **Looking Forward to College.** This booklet provides students with indepth information about evaluating interests and abilities, selecting colleges and courses study, applying for admissions, taking admissions tests, and obtaining scholarships and financial aid. The booklet also provides a month-by-month college planning guide for juniors.

* Harry R. Tutton, a counselor at Miramonte High School in Orinda, California, publishes a pamphlet entitled **College Planning Workshop.** This pamphlet is designed to provide some basic information about college admissions and answers the following general questions:

  ° What tests should be taken for college?
  ° When should the college tests be taken?
  ° How may a student prepare for college tests?

  Then for each test (SAT, ACT, and Achievement Tests) the author answers the following questions:

  ° What is the test?
  ° Who can take the test?
  ° When can the test be taken?
  ° Where is the test taken?
  ° How is it scored?
  ° How do you register?
  ° Where can you get more information about the test?

* Chatham Township School District in Chatham Township, New Jersey publishes a booklet entitled **Testing Manual** . The purpose of this booklet is to delineate and coordinate all elements of the current testing program in the school district.

The booklet provides a definition of fundamental test terms, and a description of the contents and purposes of all the standardized and supplemental tests given in the school district, including the ACT, SAT and PSAT tests. The booklet also outlines the policies and procedures used by the school system in reporting scores and gives illustrations of how the scores are reported. A bibliography of books and articles on testing is also included.

* School personnel can keep parents informed about books and articles that are available to provide information about testing in general by publishing bibliographies or by recommending particular publications. A recent publication designed to help parents comprehend school testing programs is a book written by Ann E. Boehm and Mary Alice White entitled, **The Parents' Handbook on School Testing** (published by Teachers College, Columbia University, 1982). This book provides parents with information about the following subjects.

- ° Achievement, intelligence, and aptitude test scores
- ° What each test measures
- ° Questions to ask during parent-teacher conference
- ° Preparing children for testing
- ° Tests for children with special needs
- ° Selecting a school, both public and private

IV. UTILIZATION OF COLLEGE ADMISSIONS TEST RESULTS

IV. UTILIZATION OF COLLEGE ADMISSIONS TEST RESULTS

When students take the PSAT, SAT or ACT tests in their junior year or possibly sophomore year in high school, there is time to take courses or plan reviews of materials that will help in preparing for college admissions tests in the senior year or will result in improved academic performance. In order to determine which courses need to be taken or which areas need to be reviewed, it is essential that students, with the help of counselors and teachers, closely examine and analyze the report of test results provided by the testing organizations.

School personnel can also utilize the results of admissions tests in their program planning. An analysis of the results can reveal academic areas or study skills that need to be emphasized or reviewed. The reports of test results can also be used by the school in reporting the academic performances and career interests of college-bound students to school boards, parent groups, faculty, and students.

On the following pages are specific comments regarding the value of analyzing the results of admissions tests.

PSAT/NMSQT: Information for Students

This test is taken by students in their sophomore or junior years in high school. It is considered a preview of the SAT test and can provide valuable information for the student on areas that need to be emphasized in preparing for either the ACT or SAT tests or in improving academic performance in general.

The student receives a **Report of Student Answers** from the College Board. This report shows the correct answers to all sections of the test as well as reponses that the student gave to each question. The student also receives a booklet entitled **About Your PSAT/NMSQT Scores** which contains information to help the student interpret the scores. The student can obtain valuable information from examining the results of the test. Looking at the questions and answers will show the student how effective various test-taking strategies were. As the student goes through the test results, he or she should try to determine the following:

1. What were the reasons for missing questions that the student should have been able to answer? (e.g. working too fast and making careless errors, working too slow and not completing questions, filling out the answer sheet incorrectly, not making educated guesses.)

2. What were reasons for not being able to answer difficult questions? (e.g. difficulty in interpreting questions, incorrect analysis of problems, lack of knowledge about a subject.)

Once the reasons for difficulties on the test are determined, the student should select, with the help of counselors and teachers, courses that need to be taken or materials and test taking strategies that need to be reviewed in order to correct deficiencies.

A **Counselor's Guide to Helping Students Learn from the PSAT/NMSQT**, available from the College Board, provides both counselors and students with important information about interpreting PSAT/NMSQT scores.

PSAT/NMSQT: Information for the School and School Districts

A new service provided by the PSAT/NMSQT Reporting Services (Box 589, Princeton, NJ 08541, (1-609-734-3800) is extremely valuable in assisting schools and school districts in obtaining information on test takers for trend analysis and program planning.

- **A Summary of Answers Report** summarizes the number and percent of a school's and/or school district's students giving the correct answer, incorrect answers, and omitting questions for each question on the test. The information is even provided for each response foil. The report also provides national data for each breakdown. The cost of the report for an individual school is $25, and for a school district $45.

- **A Group School Summary Report** provides for all secondary schools within a school system the number of students taking the PSAT/-NMSQT, verbal and math scores, self-reported grade averages, ethnic backgrounds, and college major and career choices for all the students who have taken the PSAT. The cost of this report is $20.

- Punched cards and magnetic tapes providing the data found on the **Summary of Answers** and **Group School Summary Reports** are also available from the PSAT/NMSQT Reporting Service.

By examining these reports, school personnel can determine specific questions as well as general academic areas that are causing difficulty for the students. In addition to identifying what needs to be done for individual students, this information can also be valuable in evaluating the school's academic programs in the areas of mathematics, English language, and reading.

SAT: Information for Students

Approximately six weeks after the SAT and TSWE tests, the student receives a Student Report that includes scores and percentile ranks. Along with this report the student receives a booklet entitled **Your Score Report** which helps the student interpret and understand the scores and other information in the report. Another publication entitled **The ATP Guide for High Schools and Colleges** is also an excellent guide to interpreting scores.

The **Student Report** shows current SAT-verbal and SAT-mathematical scores, including verbal subscores and TSWE scores, as well as scores for SAT tests taken previously. The report includes percentile ranks that show the relationship of each student's scores to the scores of a representative sample of high school students and college-bound seniors. While this information is not broken down for each question on the test, the student can obtain indications of general content areas that need improvement.

The Student Report also provides information on the student's background, accomplishments, and academic and personal aspirations that are valuable in educational and career planning. For most administrations of the SAT the student can obtain a copy of the test questions, the correct answers, a copy of his or her answer sheet, and raw scores. The fee is approximately $5.50 for this service. By examining the responses to each question on the test, the student can obtain specific information about areas of difficulty, as well as content and test taking strategies that need to be reviewed.

SAT: Information for Schools and School Districts

Each summer the Admission Testing Program of the College Board prepares an **Individual ATP Summary Report** for every high school that had at least one hundred students who participated in the ATP during the three years prior to May of their senior year. An abbreviated form of this report is sent to schools with fifty-five to ninety-nine participating students.

> This report displays not only student scores on the SAT, TSWE, and Achievement Tests, but also responses to questions on the Student Descriptive Questionnaire (high school records, sociometric characteristics, and college plans for the college bound seniors). In addition, schools are sent reports displaying the same type of data as shown on the ATP Summary Report for College-Bound Seniors in the state of Colorado, in ten Western states, and in the nation.
>
> The information presented in these reports provides school personnel with insight into how well their students are achieving on the tests as compared to other college-bound seniors in various parts of the country. It also indicates the areas on the tests that are difficult for students, and the characteristics and college plans of their students. This information should prove valuable in evaluating academic and counseling programs in the schools.

ACT: Information for Students

When choosing a test date, students should consider the application deadlines of the colleges or scholarship agencies to which they are applying, and should realize that it takes four to seven weeks after the test date for ACT to process and mail score reports. Traditionally, most students have taken the ACT Assessment during the senior year. However, with increased emphasis on early application for colleges, scholarships, and appointments to service academies, many institutions and agencies now recommend that students take the ACT Assessment during the second semester of the junior year or during the summer following the junior year.

Students are not penalized for taking the ACT before their senior year. Because the ACT tests measure educational development that is undergoing change, adjustments are made in the test scores to compensate for differences in the student's educational level at the time of testing.

Beginning with the 1982-83 testing year, all students taking the ACT Assessment will receive a personalized narrative interpretation of their results called the **1982-83 ACT Assessment Student Report**. On the new report, information about the results (high school grades, standard scores, percentile ranking with other students nationally) is combined with interpretive commentary keyed directly to the student's own test scores, plans, and interests.

Information on the report is organized in three key subject areas designed to help college-bound students answer the kinds of questions most likely to be on their minds:

How did I do on the test?
What kinds of colleges would be a good fit for me?
What kinds of majors and occupations do people with interests like mine choose?

With the ACT Student Report, students receive a thirteen page interpretation booklet that assists with a more indepth description of the assessment results. Contents of the booklet are contained in the following outline:

- Your ACT Test Scores
  - The ACT Tests
  - Understanding Your ACT Test Scores
  - What About Retaking the Tests?

- Your College Planning
  - How Tough Will It Be?
  - How are Test Scores and Other Factors Related to College Grades?
  - Which Colleges Meet Your Needs?
  - References for College Planning
  - Meeting College Costs
  - Financial Aid References

- Your Educational/Occupational Planning
  - Work Tasks and Interests
  - The World-of-Work Map
  - References Describing Occupations
  - Steps in Career Exploration
  - How Colleges Use Your ACT Report
  - Policies and Procedures Related to the ACT Assessment
  - Additional Score Reports and Record Updates

In addition to this new report for students, ACT continues to furnish high school counselors with a copy of the traditional **High School Report**. The High School Report displays information that helps counselors provide answers to the questions that college-bound students are likely to ask:

* In which subjects will I do well?
* In which courses should I expect trouble?
* How heavy an academic load should I carry?
* What majors should I consider?
* What occupations involve work activities I like?
* Which college is best for me?

Although ACT results are recorded by general areas (English, math, social studies, natural sciences, and composite) and are not broken down for each question, the ACT Student and High School Reports are valuable in assisting students to identify academic subject areas where they may demonstrate strong or weak skills. By comparing high school grades with ACT test scores, the student can raise interesting questions about discrepancies between grades and scores. For example, why does a student have a low grade in math and a high standard score on the ACT math test? By comparing the ACT scores in four subject areas, the students can usually identify the area that needs immediate attention. An examination of the student's ranking with other students nationally provides an indication of where the students stands competitively with other students. If the student takes the ACT Assessment on either the April or June test dates during the junior year in high school, there is time to meet the needs identified by this type of analysis.

In most administrations of the ACT the student can have a copy of the test questions used in determining his or her scores, a copy of his or her answer sheet, a list of the correct answers to the questions, the raw scores used to calculate the reported scores, and a table to convert his or her raw scores to the reported scores. The fee is approximately $4.00 for this service. By examining the responses to each question on the test, the student can obtain specific information about areas of difficulty, as well as content and test taking strategies that need to be reviewed.

ACT: Information for Schools and School Districts

The ACT High School Profile Service is provided for high schools that have more than fifty students taking the ACT assessment annually. This service includes the **ACT High School Profile Report**, which presents descriptive group information about the tested students for use in counseling and program planning. Following are some of the tables presented in this report which can be utilized in evaluating how well programs are preparing students for entrance into college.

Distribution of ACT Score Frequencies, Percentile Ranks, and Percentage for Man and Women
Distributions of High School Grades
Distributions of Interest Score Scales for Men, Women and Total
Percentile Distributions of Planned Educational Majors and Vocational Choice Fields
Educational Degree Aspirations
Number of High School Out-of-Class Accomplishments in Different Areas
Profile of Student Averages According to Reported High School Curriculum
College Extracurricular Plans Versus High School Participation
Student Satisfaction with Various Aspects of the Local High School
Relative Importance of College Choice Factors

The ACT program also provides charts with state and national data on the areas presented in the **High School Profile Report** so that comparisons can be made between results for the students in a particular school and those students in other schools in the state and across the nation.

Using Test Results to Improve College Admissions Opportunities

Dwight Grotewald, president of the Colorado Council on High School/College Relations, and Millard Storey, Director of Admissions at the University of Colorado in Boulder, have several suggestions regarding the use of test results in the admission process.

They feel that it is extremely valuable for students who are interested in college admissions to take the PSAT early in their junior year. An examination of the results of the PSAT will reveal which areas the students need to review in preparation for the ACT or SAT and provide guidance in terms of the courses that need to be taken in the student's senior year to correct academic deficiencies. The PSAT results can also be used in initial thinking about selection of colleges as counseling personnel assist students to be realistic in terms of college selections. If it appears that a student may not have the scores required for admissions to the college of first choice, then the student should be guided into thinking about alternative choices.

Grotewald and Storey recommend that the college bound students take either the SAT or the ACT in the spring of their junior year. By taking these tests at this time, there is still time to plan courses and to consider taking the tests again in the senior year. A comparison of the PSAT results with either the SAT or ACT can be used as a guide in the decision as to whether it is necessary to take the tests again. If there is a significant discrepancy between the levels of achievement on these tests, then this would indicate a need to retake the exams. Another indication would be a significant difference between the level of achievement in school and the scores on the tests. The retaking of SAT or ACT should be done early in the fall of the senior year, leaving sufficient time for the colleges to consider the new test scores. Most college admission officers are prepared to help both high school counselors and students decide about the necessity of retaking admission exams.

While admissions tests are important in the college admissions process, both Grotewald and Storey emphasize that test results are only one of several factors considered. Grades in high school, extracurricular activities, student awards and recommendations are examples of other factors that are carefully considered in making a decision about an applicant for admission.

In addition to the suggestions previously noted in the chapter on the value of schools using the college admissions test results in program planning, Mr. Storey suggests that schools look not only at current test results but also at test results over a period of time. A longitudinal examination can signal changes in student achievement over time that are valuable to note in analyzing curriculum needs.

V. TEST PREPARATION PROGRAMS IN COLORADO

V. TEST PREPARATION PROGRAMS IN COLORADO

On the following page representative samples of test-preparation programs in Colorado are described. These descriptions are organized into three sections:

School Test-Preparation Programs

Community Test-Preparation Programs

Commercial Test-Preparation Programs

The details for each program were provided by the people responsible for the program described. The State Department did not attempt to evaluate the programs in terms of content or staff. Therefore, the appearance of a program in the sourcebook or the length of a description of a program does not imply an endorsement by the State Department. The descriptions of programs were included in the sourcebook to inform educators and interested parents and students about the types and general nature of test preparation programs that are being conducted in state. These descriptions also provide the names of resource people who have experience in test preparation and who can be contacted for further information about a particular program.

School Test Preparation Programs

In October 1982 the State Department sent a letter to each public high school principal in Colorado requesting information about test preparation programs provided by the schools. A similar letter was sent to member schools of the Association of Colorado Independent Schools. The Catholic Archdiocese was also contacted regarding parochial schools that might have test preparation programs.

It is apparent from this survey that a majority of the high schools in Colorado either do not have or did not report specific test preparation programs (the State Department received information about test preparation courses or programs from twenty-seven high schools). Discussions with counselors at high schools that do not have specific test preparation programs indicate that school personnel often feel that the regular course selections offered by the high schools provide an adequate background to prepare students for the college admissions tests. In addition, a number of the high schools provide elective courses in areas such as composition, grammar, reading and vocabulary building which focus on the types of skills found on admissions tests. Generally school personnel feel that if a student is serious about studying and takes courses that cover the skills found in admissions tests, there shouldn't be any problem with achieving well on these tests.

Among the schools that do provide specific test preparation programs, a majority provide a week or two of review just before the test dates. These short programs are usually designed to provide students with information about the content and format of the tests, to cover some general test-taking strategies, and to review a few basic concepts that the test items include. A limited number of high schools offer semester long courses designed to prepare students for test preparation. Almost all of these semester courses are voluntary non-credit courses provided at times that do not interfere with a student's regular course work. They are generally tutorial in nature, providing instruction on concepts that are identified by taking sample SAT and ACT tests. These courses also emphasize test taking strategies designed to relieve test anxiety.

Following are descriptions of test-preparation courses or programs offered by various schools in Colorado. Some of these programs are described in greater detail than other programs. However, the detail with which a program is decribed does not imply that any one approach is more effective than another approach. The purpose of this section is to provide illustrations of various approaches and to supply the names of educators in the state who can provide additional information about these approaches.

Alameda Senior High School
1255 S. Wadsworth Blvd.
Lakewood, CO. 80226

Contact: Diana Kinsey
Advanced Placement Coordinator
986-4216

Alameda Senior High School offers classes in the evening for a six week period to prepare students for ACT and SAT tests. The class sessions are held twice a week from 6:30 to 8:30 p.m. according to the following schedule:

1st week - English
2nd week - English/natural science
3rd week - math
4th week - math/natural science
5th week - social studies
6th week - social studies/natural science

Each class session is taught by a teacher experienced in the area being covered. Students receive basic instruction on major topics and skills necessary to perform competently on the tests. Students take sample tests under exam conditions. These tests are graded and discussed. Instructors use Barron's How to Prepare for the ACT and copies of sample tests in their work with the students. Plans are being made to use computer programs. In addition to the class, students preparing for college admissions tests can take a credit elective course in Advanced Reading Skills which includes a unit that deals with test preparation.

Cost: $30

Boulder High School
1604 Arapahoe Avenue
Boulder, CO 80302

Contact: Roe Willis, Math Instructor
Jane Carlson, English Instructor
442-2430

Boulder High School offers an eight-session course (4 verbal and 4 math) on preparation for the SAT. The sessions are held on Tuesdays and Thursdays from 3:15 to 4:30 p.m. The course is open to juniors and seniors. Students are familiarized with the structure and scope of the SAT. Item types are discussed along with strategies and the reasoning involved in problem solutions. The concepts of pacing for a timed exam, guessing vs. not guessing, and discussion of test anxiety are also addressed. Sample tests from Monarch's Preparation for the SAT by E. Gruber and M. Bramson are completed at home by the students, and questions are answered in the sessions regarding techniques for solving difficult problems.

Cost: materials only

Cheyenne Mountain High School
1200 Cresta Road
Colorado Springs, CO 80906

Contact: Ron Walden, Superintendent
473-5240

A course on SAT preparation is offered during the summer months for students entering their senior year in high school. The course meets for two evenings each week for two hours over a ten week period. There is a heavy emphasis on vocabulary development with homework assignments of word lists and numerous quizzes in class and at home. There is also practice and instruction on reading comprehension, analogies, sentence completion, and grammar. Geometry and basic algebra are reviewed and practice is provided in solving SAT-type mathematics problems. During the course, two full-length SAT tests are administered under timed conditions. Barron's How to Prepare for College Entrance Examination SAT Tests and supplementary materials prepared by the instructors are used in the course. According to the instructors, students who work seriously at the program and do the required homework have shown significant results.

Cost: $100

Coronado High School **Contact: George O. Buner**
1590 W. Filmore **635-6424**
Colorado Springs, CO. 80904

The English, social studies, math and science departments are provided with sample ACT and SAT test booklets and are encouraged to test their students in their particular areas to determine academic needs. The English department has developed a special unit on the college entrance tests. Questions are taken from the test booklets so students become familiar with the testing items.

Students in grades 10 and 11 who score in the top 10% of their class are sent individual memos to encourage them to take the PSAT/NMSQT. All other students are encouraged to take the PSAT/NMSQT if they are planning on college and need practice on college entrance test taking. Based on the results of ACT, SAT, and PSAT/NMSQT, student achievement is evaluated and those students identified as needing remediation are provided additional help. Teachers are encouraged to take the tests or proctor the tests so that they have a feeling for what the student has to do.

Cost: None

Englewood High School **Contact: Bob Suder**
3800 South Logan **College Test Coordinator**
Englewood, Colorado **761- 0894**

Englewood High School sponsors an ACT/SAT Preparation Class for any senior planning to take college entrance examinations. This class is offered from 7:00 a.m. to 8:00 a.m. on Mondays, Wednesdays, and Fridays for a period of five weeks. The following areas are reviewed during this five week period:

1st week - chemistry, physics, biology
2nd week - math
3rd week - English
4th week - social studies
5th week - test taking techniques and strategies
review of any of the above areas.

Each class session is conducted by an instructor experienced in the area being covered. General objectives for each area include building familiarity with test items, reviewing previously learned skills, and developing new academic skills. Considerable emphasis is also placed on building test-taking confidence and reviewing test-taking strategies. Materials used in these classes include Barron's How to Prepare for the ACT, sample copies of previous ACT and SAT tests, and classroom materials prepared by the instructors.

Cost: None

George Washington High School
685 S. Monaco St.
Denver, CO. 80224

Contact: Ray Shaffer
College Counselor
399-2214

A specific course on test preparation is not offered; however, there is a program for disseminating test information to students. The objectives of this program are as follows:

1. To familiarize students with the content, procedures, and structure of college entrance tests so that they can best utilize their academic capabilities.

2. To develop positive and realistic attitudes towards tests.
Test registration materials, sample tests, brochures on taking the SAT, and college handbooks are distributed and discussed during the following activities:
. Classroom visits
. Structured and walk-in counseling
. Specialized student meetings
. Postings, mailings and telephone calls
. Specialized parent meetings

Cost: None

Lakewood Senior High School
9700 W. 8th Ave.
Lakewood, Colorado 80215

Contact: Janet E. Zamboni
English Teacher
238-0566

Lakewood Senior High School offers a non-credit program in preparation for the college admissions examinations for a period of four-to-six weeks prior to scheduled test dates. During this period, classes in test preparation are offered three times a day (6:30-7:30 a.m., 11:30-12:15 p.m., and 2:15-3:15 p.m.). These classes are open to 10th, 11th and 12th graders on a voluntary basis, with the condition that a student can attend only one class session a day. The major objectives of the course are as follows:

- To familiarize students with the procedures, content, and uses of the tests.
- To provide a systematic program for review of skills in each area.
- To help students deal with stress before and after the test.
- To give students confidence in their own ability.
- To provide general test-taking strategies.
- To give students practice in taking sample tests.

The first week of the program involves intense structured presentations on overall test taking strategies. The other weeks are spent on taking practice tests and discussing specific content questions. The emphasis of the program is on providing individualized help. The course is taught primarily by one instructor with assistance from other instructors when necessary. Materials include teacher-developed materials, sample SAT and ACT tests, and Literary Cavalcade work sheets. Cost: None

Manual High School
1700 E. 28th St.
Denver, Colorado

Contact: Maryls Hardesty
Social Studies Teacher
295-6600

A series of three one-hour sessions are provided for students taking the PSAT. These sessions are open to 10th and 11th graders and are usually conducted during lunch periods. The purposes of these sessions are to acquaint students with the PSAT test, to practice test taking, to evaluate practice tests, and to identify areas that need review.

During these sessions students take sample PSAT tests. An item analysis is conducted on the sample tests, providing percentiles for each question and each response foil. Based on the analysis, a report is written summarizing the results for all the students taking the sample test and identifying skills that appear to need review. This report is circulated to members of the faculty who incorporate the identified needs into their instructional programs. Teachers and counselors can also obtain information about the achievement of individual students from the items analysis.

Cost: None

Mapleton High School
601 E. 64th Ave.
Denver, Colorado 80229

Contact: Linda Molner
Reading Specialist
288-6655
Available for Inservice

Mapleton High School offers to seniors an elective two-semester course on the development of reading and language skills which includes preparation work for the ACT and SAT tests. This is considered an advanced course; however, it is open to any senior planning or applying for college admission.

The first semester involves instruction in the following areas:

Study skills dvelopment (including notetaking, managing time, and
general test taking strategies
Speed Reading
ACT Preparation (SAT is handled on an individual basis)
Expository Writing

The second semester involves instruction in the following areas:

Analysis of Literature
Essay Writing
Research Writing

The course is conducted primarily by Linda Molner, with the assistance of other instructors when needed (e.g., preparation for science portion of ACT Test). Materials include materials developed by the instructor and sample ACT and SAT tests. Other materials recommended by Linda Molner include:

Levine, Harold. Vocabulary for High School Students. Amsco Publishers.

Payne, Lucille. The Lively Art of Writing.

Spargo, Edward. The Now Student. Jamestown Publishing.

The Wordpak Vocabulary. Perfection Form.

Cost: None

Northglenn Senior High School **601 West 100th Place** **Denver, CO. 80221**	**Contact: George McCulloch** **Principal** **451-1241**

The following measures are taken at Northglenn High School staff members to aid students in taking the ACT or SAT:

1. Tests are studied by staff members to clarify types of test questions asked. From this data the staff members take the following steps:
    - a) Counsel all junior high students and incoming sophomore as to which courses will best prepare them for college and the college entrance exams.
    - b) Offer more sections in the schedule of the courses that have been identified as helpful in preparing for exams.
    - c) Emphasize certain study skills that help prepare students for admissions tests.
    - d) Include, if necessary, more materials in the curriculum related to the skills covered in the admissions tests.
2. Throughout the year, the Advanced Placement American History teachers model a number of exercises after the ACT reading comprehension tests. These teachers also use samples of the social studies portion of the ACT test in their instruction.

3. The Counseling Department takes the following steps:

   a) Encourages students likely to take the tests to take a college preparatory schedule of courses.
   b) Encourages and administers the PSAT to interested students for practice.
   c) Distributes preparation materials provided by test companies.
   d) Informs students that certain programs available on an Apple II Computer can enhance test skills. All students are encouraged to learn how to operate the micro-computers and use the tutorial programs for the ACT and SAT.
   e) Loans copies of commercial entrance exam practice books to students who request them.
   f) Discusses in certain college preparatory classes what to expect in the way of form and content on the ACT and SAT.
   g) Advertises certain workshops that prepare students for the ACT of SAT.

4. The Library Media Specialists provide instruction on research skills and obtain advanced materials for students interested in college admissions.

Cost: None

Palmer High School
301 N. Nevada
Colorado Springs, CO 80903

Contact: Robert Brownson
591-9286

During the 1981-82 school year, separate 10-week courses for ACT and SAT preparation were offered by Palmer High School for 10th, 11th, and 12th graders. Each course was designed to prepare students for the types of questions they would encounter on each of the tests. Students took practice exams under conditions similar to those they would experience in a real testing situation. The class then spent several hours discussing the questions that were found to be difficult. In-depth attention was given to vocabulary study, work habits, and college survival.

During the 1982-83 school year, due to a lack of enrollment in the 10 week course, the course was reduced to a single four-week class which met once a week for three hours. The purpose of this course is to share some observations on test strategies with the students and provide some guidance on their own preparation for examinations. Materials used in the course include Barron's SAT and ACT prepartion materials and Vocabulary: Key to Success written by Mr. Brownson.

Cost:		
	1981-82	$75.00
	1982-83	$25.00

Pomona High School
8101 W. Pomona Drive
Arvada, CO 80005

Contact: Jerry McLellon
Counselor
423-9092

Pomona High School offers a one week class for juniors and seniors on preparation for college admissions tests. The class is given for one hour a day at a time that is convenient for students and yet does not interfere with regular classroom activities. The primary purpose of the class is to familiarize students with the contents of the admissions tests and to provide test-taking strategies that will reduce test taking anxiety. The following areas are covered during the week:

Monday: An orientation to test-taking is given, including the contents of the tests, the meaning and uses of the test results, and general test-taking approaches.

Tuesday-Friday: Each class session is spent on one of the following areas: English, math, science, and social studies. Each class session is taught by an instructor experienced in the area being covered. The emphasis of each session is on test-taking strategies and answering specific questions from students. Students are encouraged to review Barron's How to Prepare for American College Testing Programs and sample copies of ACT and SAT before each class session.

Pomona encourages students interested in college to take the PSAT and ACT tests in their junior years. Students taking the college entrance examinations are also encouraged to take elective courses in American Grammars, Semantics, Etymology, and Composition for the College Bound.

Cost: Materials only

Pueblo County High School
1080 Lane 35
Pueblo, Colorado 81006

Contact: John Klomp, Principal
Richard Hartgraves,
Counseling Dean 948-3351

General Description of Program:

The program consists of five evening meetings before the test. These meetings are about 1-1/2 hours in length. Four of the sessions cover the four academic areas in the ACT: English, math, science, social studies. The fifth session consists of general information about preparing academically for the test, things to do before and during the test, as well as methods of helping the student develop a positive attitude toward the test.

Objectives/goals of the program:

The prep classes are not designed to teach content of the subject area but rather to review major concepts and, in the case of social studies, major events. In the math sessions there is a great deal of time spent in showing the student how to eliminate incorrect answers and other general math test-taking strategies. In the English, science, and social studies sessions, time is spent in showing students how to read for content. Cliff's and Barron's test preparation publications are used during the sessions.

Cost: None

Regis Jesuit High School
5032 Lowell Blvd.
Denver, CO. 80221

Contacts: Bob Austin, Asst. Prin.
Bill Jelinek, Counselor
458-1833

Regis High School provides a mini-course on colleges admissions for juniors during the first two weeks in January. This course covers the entire process of selecting an appropriate college. The results of the Strong-Campbell Interest Inventory are discussed in terms of selecting a college and a course of study. People from various professions and admissions personnel from a variety of colleges give presentations that are designed to be informative about college admissions and vocational opportunities. Each student writes out his or her vocational goals and educational plans, and these are discussed in terms of college selection. The students are encouraged to take the ACT and SAT tests in their senior year. Sophomores and juniors are required to take the PSAT. Information is provided about the contents and purpose of admissions tests and the interpretation of scores.

The math club at the school participates in a College Bowl competition with a number of other public and parochial schools. The questions used in this competition are taken from sample SAT and ACT exams.

Cost: None

Thomas Jefferson High School
3950 S. Holly Street
Denver, Colorado 80237

Contact: Don Moiser
Assistant Principal for
Instruction
758-2400

Each semester two non-credit courses, one in math and another in language, are provided to help students with skills needed for the PSAT/SAT/ACT tests. The courses are open to any student on a voluntary basis. Previous tests and commercial test preparation materials including computer programs are available for the students. The courses provide students with individual and small group tutorial help in areas that the students have identified as needing review after taking the sample tests and reading other test preparation materials.

All juniors are given an orientation in taking the Comprehensive Test of Basic Skills (CTBS). During the orientation the students are provided with information on how to be "test wise." In addition, they are given sample CTBS tests which are scored during the orientation, providing immediate feedback on areas students need to review. Needs identified during the orientation and tutoring sessions are communicated to other teachers in the school, who use this information in their instruction.

Cost: Materials only

	School	Contact	Program
1.	Aspen High School Aspen, CO 81611	Pam Azzolin 925-2972	Aspen High School offers a one semester elective course entitled College Bound, primarily for 11th and 12th graders. It prepares students to take the ACT, SAT, and College Board Achievement Tests. The course also covers study skills important in developing research projects and papers. The instructor explores with students choice of college, procedures for applying, college survival skills and teacher expectations. Materials by Barron's, Cliff Notes, McMillan, and NASSP are used in the course. (no cost)
2.	Brighton High School Brighton, CO 80601	Tom Erickson 659-4830 x233	Students in College Review English and Advanced 11th Grade English spend 2-3 weeks on a unit which covers taking practice ACT tests. (no cost)
3.	Colorado Rocky Mountain School Carbondale, CO 8162		All juniors are required to take PSAT/NMSQT tests in October and all seniors are required to take the SAT during the first semester of the senior year. All seniors and many juniors take at least one achievement test in May. Four years of English and a minimum of two years of math (geometry and algebra) are required for all students before they graduate, thereby providing good background for tests. Two or three training sessions are provided to go over the format of the various admissions tests and to practice samples of the questions that will be asked.
4.	Delta High School Delta, CO 81416	Susan Jurca 874-8031	Preparatory class for ACT meets 3 hours every Wednesday evening for 5 weeks. Students study verbal, math, social studies, and natural science reading comprehension questions covered in previous ACT tests. On the last night students take a full length ACT test (Cost: $15 + materials)
5.	Fleming High School Fleming, CO 80728	Deborah Woster 265-3101	The senior high English teacher includes a session on preparation for college admissions tests during the first quarter of the year. The teacher covers vocabulary expansion, reading comprehension, test taking skills, and other vital areas. (no cost)

	School	Contact	Program
6.	Fort Collins High School Fort Collins, CO 80521	Karl Bandhauer 493-3110	A one semester elective course in Advanced Vocabulary for the College Bound and a two semester elective course in Advanced Placement English are offered for students interested in college admission. (no cost)
7.	Frederick Junior-Senior High Frederick, CO 80530	Judy Fahrnow 833-3533	In a two-week period during a junior composition course, sample ACT booklets and SAT preparation computer programs designed by the Apple II are examined. The principal objective of this examination is to acquaint students with the format of the tests and type of questions that will be presented on the actual test. Preparation is done during regular classtime. All abilities are exposed to the materials. (no cost)
8.	Glenwood Springs High School Glenwood Springs, CO 81601	Leo Williams 945-7634	A portion of a classroom period for four to five days prior to test date is spent on familiarizing juniors and seniors with the ACT registration booklet and procedures that will be followed at the test center. The students also work on sample test questions under timed conditions proportioned to actual ACT subject-matter tests. Materials used include ACT registration booklet, Barron's How to Prepare for the ACT, and materials or objective tests collected by the instructor. (no cost)
9.	Harrison High School Colorado Springs, CO 80906	Mary E. Habas 632-8510	Three times a year (fall, winter, spring) a math review is held during non-school hours (usually from 6:00 - 8:00 pm. Primarily it is a quick review of geometry, algebra, and problem solving skills. The instructor prepares materials from old SAT, ACT, PSAT tests. (no cost)

School	Contact	Program
10. Lake County High School Leadville, CO 80461	John D. Howe 486-1566	A semester-long English Language course centers around strengthening of basic grammar, vocabulary and writing skills needed for the SAT/ACT tests. Pre-tests are used to determine skills and their classroom exercises and tests are provided for each area covered. Homework is assigned to reinforce skills. Materials include teacher-prepared handouts plus texts, Messages and Meanings and Vocabulary for High School Students. (no cost)
11. North Park High School Walden, CO 80480	John D. Howe 723-4392	The English Department teachers review some of the types of questions that will be given on the SAT and ACT. Sample ACT and SAT tests are given to students one week prior to taking actual tests. (no cost)
12. West High School Denver, CO 80204	Irene Martinez Jordan 629-6961	ACT and SAT practice tests are given to students three days a week during lunch periods just prior to test dates. Any student may attend these sessions. The objectives of the program are to acquaint students with testing procedures and strategies as well as an idea of what the test will cover. Sessions are handled on a group counseling format. Materials used include ACT and SAT sample tests and Barron's test preparation materials. (no cost)

Community Test Preparation Programs

Two general categories of programs are described in this section:

- Test preparation workshops offered by community organizations.
- Test preparation workshops offered by Adult and Continuing Education Programs.

Community Workshops

While there are individual efforts made by teachers and community people to help students in their preparation for college admissions tests, the survey of existing programs revealed only one organized community effort to assist students in this area. Following is a description of that program:

Delta Sigma Theta Sorority, Inc. **Denver Alumnae Chapter** **P.O. Box 7432** **Denver, Colorado 80207**	**Contact: Dr. Betty McCummings** **3902 S. Sebring Court** **Denver, CO 80237**

The educational activities of Delta Sigma Theta Sorority, Inc. are directed at black youths in the Denver metropolitan area. The focus of its programs is on improving self-image, leadership training assistance in preparation for high school mastery, and preparation for college admissions.

The college admissions portion of the Sorority's efforts involve the following:

- The payment of college admissions test fees for black youths who cannot afford the fees
- Workshops on preparation for college admissions tests
- Workshops on the preparation of college application and financial aid forms
- Workshops on career counseling
- The award of college scholarships to black females which are renewable for a four year period

These programs are provided on a voluntary basis by members of the Sorority and other professionals in the community who are willing to contribute their time to help young people.

The availability of test preparation workshops is communicated to students and parents through functions sponsored by the Sorority and notices of the Sorority's activities that are distributed in the high schools and community centers throughout the Denver metropolitan area.

The workshops are held on an on-going basis once or twice a month in a community center or church in the central Denver area. The sessions include

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the following:

- . Orientation on how to prepare for tests, along with various test taking stategies
- . A review of the types of information found on the admissions tests
- . Identification of weak areas and planned tutoring
- . Administration of a timed SAT and ACT test

The workshops on preparation of the college admissions tests have only been in operation for one year. However, the program has generated a great deal of interest, and many students have been served.

As a follow-up to the program, the Sorority plans to communicate with the public schools the identified academic needs of the participants in the program.

Adult and Continuing Education Workshops

Community workshops designed to assist young people in preparing for college admissions tests are sometimes offered by community colleges and universities. These workshops are usually offered as part of adult or continuing education programs and are available at minimal expense to any young person interested in taking such a workshop. Four such programs are described in the following pages.

Arapahoe Community College
5900 South Sante Fe Drive
Littleton, CO 80120
794-1550
(Information about registration)

Contact: Jerre Lloyd
Reading Instructor
979-2547
(Information about contents of course)

The Adult Education Department of Arapahoe Community offers a workshop on ACT/SAT test taking on Saturdays just prior to test dates. Each workshop is four hours in length.

Description of Workshop:

A four-hour workshop to prepare high school students for these college entrance exams. Designed to familiarize test candidates with the general test format and test taking techniques to enable candidates to feel more confident and relaxed about the test. Sample SAT/ACT tests and instructor provided material for each section (analogies, antonyms, synonyms, reading comprehension, etc.) are given. Instruction is given on each section to provide practice and comprehension skills. Discussion is included on how to read the test evaluations.

Preparation of Instructor:

Jerre Lloyd - M.A. in reading. Instructor of courses in speed reading study skills, and overcoming test anxiety at Arapahoe Community College. Has taught Title I programs at both elementary and high school levels in Colorado.

Students Costs: $25 for each workshop.

Community College of Denver
Auraria Campus
Continuing Education Office
P.O. Box 4234
Denver, CO 80204
Phone: 629-2442 (for registration information)

Contact: James Cooley
756-4019
(for information about contents of course)

The Continuing Education Office of the Community College of Denver offers an eight session (2 hours per session) course on preparation for the ACT/SAT. This course is designed to help students improve and practice their math and English skills, test-taking skills, and vocabulary development. Reading comprehension techniques and grammar reviews are included. The emphasis in the course is on familiarizing the students with the requirements of the tests, helping them to recognize the areas that need review, and organizing their study preparations.

The course is offered during the fall, spring and summer semesters. The sessions are designed to meet the needs of the students in terms of the tests that they have registered to take.

Background of Instructor:

For the past five years James Cooley has been an English instructor at Cherry Creek High School. Previously, he was an English instructor for three years at Westminster High School. He has an MA in English Education. While Mr. Cooley teaches general math strategies, for at least two of the sessions a guest math instructor helps the students with specific math problems.

Student costs: $32

Continuing Education
University of Denver
Denver, Colorado 80208 Ph. 777-4422
(information about registration)

Contacts: Rosalie Bambrey 755-4589
Robert C. Hannum 753-3344
(information about contents of courses)

Two courses are offered by the Department of Continuing Education at the University of Denver: (1) Preparing for SAT/ACT Exams: Math Skills and (2) Preparing for SAT/ACT Exams: Verbal Skills. Each course meets one night a week for five consecutive weeks. Each meeting is two hours long.

The math skills course emphasizes a review and exercise of basic ideas and skills in arithmetic, algebra, and geometry. The emphasis is on doing problems and developing strategies for test taking. The problems tested and discussed in class were developed by the instructor and are structured similar to SAT/ACT test formats. The basic objectives of the program are to increase understanding of basic algebra and geometry, to increase problem solving ability, and to decrease math and test anxiety.

The verbal skills course covers the content of formatting of the verbal sections of the SAT and ACT tests and provides guidance to students on how to determine strength and weaknesses in verbal skills. The students review and practice verbal skills such as word recognition (vocabulary), sentence completions, analogies, grammar, and reading comprehension. The emphasis is on intensive verbal skills work, with some allowances for individual problems. Information is also provided on psychology of and general strategies for test taking. Materials for the course include sample SAT/ACT tests and materials prepared by the instructor.

Preparation of Instructors: Rosalie Bambrey is currently a teacher in the Cherry Creek School District and has had extensive experience as an educational consultant and tutor. Ms. Bambrey has a B.A. in educational psychology, an M.A. in Education, and is currently completing her Ed. D. at the University of Denver.

Bob Hannum is currently assistant professor of statistics at the University of Denver and has a Ph. D. in statistics from Florida State University.

Student Costs: $55 for each course.

Jefferson County Adult Education	**Rosie Casey**
10801 West 44th Ave.	**422-2387**
Wheatridge, CO. 80033	

The Adult Division of the Jefferson County Public Schools offers a class in College Board Preparation (SAT/ACT). The class meets two evenings a week for four weeks (a total of 16 hours of instruction).

The class focuses on test taking and stress management strategies as well as the content of the ACT/SAT tests. Instructors are content area teachers. The texts used in the class are Barron's ACT Preparation Book, 4th edition and Barron's SAT Preparation Book, 11th edition.

Student Costs: $36

Commercial Test Preparation Programs

The commercial test preparation programs identified during the preparation for the sourcebook (i.e. programs that operate outside of the secondary schools and colleges and involve a fee for services) fall into two general categories:

- Commercial test preparation services that are in the full-time business of preparing students for tests and college admissions.
- Individual professional tutors (usually certified teachers) who offer programs or workshops on test preparation and/or college admissions on a part-time basis.

The services offered by the private test preparation programs vary considerably in terms of content, length of instruction, and cost of programs. Any parent or student considering instruction beyond that provided by the public school should be extremely careful in evaluating services offered by these test preparation programs, particularly where there is an expenditure of money as well as time involved.

Dr. Jerry Bobrow in his publication **A Consumer's Guide to College and Graduate Entrance Exam Preparation Courses** (Bobrow Test Preparation Services, 17317 Roscoe Blvd., Northridge, Ca. 91325) suggests that one of the best ways to evaluate the potential of a test preparation program is to talk with other students who have taken these courses and find out about their experiences. Friends or school personnel may know about various courses or may be able to come up with other students who have taken a course. Bobrow also feels that a respectable program will be glad to answer any of the following questions which are valuable in determining the potential value of a program:

(1) How long is the program? How many class meetings? Length of sessions? When are they held?
(2) Where are the classes located? If they are held at a school, is the class sponsored or sanctioned by that school, or is the program just renting the facilities?
(3) Who does the actual teaching? Are the instructors fully credentialed or are they graduate students? Is a specialist used for each subject area?
(4) Is the instruction live or on tape? If both, what percentage of each?
(5) What materials are being used? May they be retained by the student?
(6) How much does the course cost? Are all materials included?
(7) May the courses be taken again for free or a reduced fee if the student needs to repeat it?
(8) What is the average size of the class? Is it actually a large lecture or is the instruction more personal?
(9) How often are the programs offered, and how many years have they been offered?
(10) Can the student and the parent(s) sit through the first meeting free to evaluate the class?

(11) Can the student make up missed meetings for free? If so, how?
(12) Can the student tape the lectures for his or her own use?
(13) How are the programs evaluated and by whom?
(14) How can the student and parent obtain more information about the value of the program? Is there a professional organization (university, state department of education, better business bureau) that can comment on the regulation of the program?

Following are descriptions of four commercial programs. As stated previously, these descriptions are meant to be informative but not evaluative. Because the State Department does not endorse any particular program, it is up to the interested party to use Bobrow's questions or some other process that has been found valuable in evaluating educational programs.

The directors of these programs have been very cooperative with the State Department in sharing test-preparation techniques and have indicated an interest in sharing this information with any interested educators.

G/M/W CONSULTANTS, INC.
Box 121
Longmont, CO 80501

Contact: Mildred Gamble 772-6598
John McKenna 772-5475

Major Components of 24-Hour Preparatory for Students:

PSAT/SAT Basic Program

4 3-hour sessions verbal component
4 3-hour sessions math component

Optional Extra Hours

1 2-hour session Test of Standard Written English (TSWE)
1 1-hour session Preparation of VITA. admissions, scholarship forms (parents invited)

ACT Basic Program

3 3-hour sessions English Usage
3 3-hour sessions Math Usage
1 3-hour sessions Social Studies Reading
1 3-hour sessions Natural Sciences Reading

Optional Extra Hours

1 2-hour punctuation/grammar review
1 1-hour session Preparation of VITA, admissions, scholarship forms (parents invited)

Instructional program includes:

-- review of major research findings regarding "coaching"
-- simulations of test taking, using SAT and ACT released former exams
-- scoring of exams and tabulations of scores, using conversion charts
-- rehearsal of time management strategies
-- rehearsal of stress reduction and positve thinking strategies
-- analysis of English usage, math usage, social studies reading comprehension, and science reading comprehension items of the ACT

- development of thinking pattern for processing verbal items, utilizing structural and transformational linguistics, levels of questioning, and patterns of reasoning
- item analysis within verbal sections of the PSAT/SAT tests
- review of mathematical concepts tested in arithmetic, algebra and geometry
- development of attack procedures and problem-solving techniques for math items

Background of Instructors:

Mildred Gamble: Currently Language Arts curriculum coordinator in St. Vrain Valley Public Schools; 23 years as high school English teacher; M.A.T. in English and linguistics; B.A. in English and speech.

John McKenna: Recently returned from serving as coordinator of staff development and tutorial programs at American School in Monterey, Mexico. Over thirty years experience in education as school superintendent, college instructor, and high school teacher in a number of states. Ph. D. in school administration.

G/M/W Consultants is available to conduct workshops for school districts on developing and organizing test preparation programs and providing students and parents with credential preparation information for admissions and scholarship application.

Students Costs:

In small group settings, the full 24 hour program costs $200. There is no additional cost for the optional three hours. Students desiring one-on-one tutorial programs structure them according to perceived needs at $15 an hour. Intensive weekend workshops are now being developed as an alternative program.

The Language Works
301 Walnut Street
Fort Morgan, CO. 80701

Contact: Beverly Haley
867-4612

General description of program:

Beginning 6-8 weeks prior to an ACT Test date, a series of 8 two-hour sessions are scheduled. The eight sessions are broken down as follows: 3 sessions for the English usage portion, 3 for math portion, and 1 each for social studies and natural sciences readings questions. Before the series of sessions begins, an orientation meeting is held to inform both the students and their parents of the purposes and procedures to be used.

Objectives of program:

1. To familiarize students with the contents and patterns found on ACT test by identifying the skills and concepts being tested.
2. To provide practice in taking the ACT exam.
3. To analyze test results and identify skills and concepts that need renewal.
4. To review and drill these skills and concepts.
5. To refresh students' recall of skills so that they may go into the testing room with confidence that they will perform as best they are able.

Preparation of Instructors:

Richard Haley - experienced, certified teacher in mathematics and social studies.
Beverly Haley - experienced, certified teacher in English and language arts (taught Freshman Rhetoric at University of Illinois, 1981-82).

Student Costs: $100 per student for eight session series.

PREP INC. (Professional Research for Educational Planning, Inc.)
2124 S. Birch St. **Contact: Ceel Kenny, Director**
Denver, CO. 80222 **758-0226**

PREP INC. offers classes designed to develop the student's test-taking skills, and maximize the student's scores on a number of college admissions tests, including the ACT, PSAT, and SAT. The general goal of these classes is to help students assess their own learning needs and to develop a systematic approach to meet these needs.

The preparation classes include all information pertinent to the particular test as well as teacher-prepared materials that cover specific details. PREP INC. endeavors to prepare students for various testing skills and at the same time improve the student's basic skills. There is an emphasis throughout the program on activities that minimize test anxiety and prepare students to "feel ready" to take the tests. The class size averages around ten students, providing ample opportunity for individualized help.

Materials used in classes include preparation books with special emphasis on Barron's books, a copyrighted SAT program by Irvin W. Katz, and specially prepared materials from the PREP staff.

All instructors have had educational backgrounds and have also been specifically trained in their area of instruction. Each teacher is required to take the test they are presenting so as to be familiar with material and test timing. Teachers must demonstrate an outstanding rapport with students. PREP INC. requires all teachers to be qualified for the teaching positions and to complete a specialized in-service.

COSTS: PSAT, SAT or SAT - $135 for a 7-week course (each test). Classes meet for a 2-hour class once a week.

Stanley H. Kaplan Education Centers
470 S. Colorado Blvd.
Denver, Colorado 80222

Contact: Ms. Diane Shames, Director
399-8002

The Stanley H. Kaplan Educational Center offers courses which are designed to help students achieve maximum potential on the SAT and ACT exams and to provide students with verbal, mathematical and analytical skills which will help them function successfully in college.

The SAT and ACT courses have a three-pronged approach: (1) ten 4-hour class sessions with a teacher trained in Kaplan methods; (2) extensive home-study materials and exercises which reinforce knowledge and skills learned in class; and (3) TEST-N-TAPE laboratory programs that allow students to supplement and reinforce knowledge and skills at times most convenient to them.

The SAT course covers the verbal and math skills found on the SAT test, and the ACT course covers the verbal, math, and social studies and natural science reading skills found on the ACT test. Students are provided with opportunities to learn to analyze, to read with understanding, to reason through problems, to abstract and define principles and to work quickly and thoroughly. In order to measure progress, students are given diagnostic exams at the beginning of the courses and a simulated SAT or ACT exam at the end of the courses.

Sessions are taught with disposable printed lesson booklets that are used by the student as a "text" or a "workbook." There are cassette tapes available for each lesson which may be used if the student is unable to attend the class. There is also a tape laboratory which consists of approximately 250 hours of supplementary tests and cassette tapes, used by all students independently to supplement knowledge and practice techniques acquired in the class. Home-study materials consist of a lesson plan which coordinates with about ten soft cover homework books. The student does weekly assignments according to a lesson plan, which reinforce material covered in class and prepares him/her for the upcoming lesson.

Instructors are required to display proficiency in math, verbal and analytical skill by having scored within the top 10% percentile on the GRE and SAT, and must have a very high undergraduate G.P.A. Also instructors must have an outgoing personality and demonstrate a love and enthusiasm for teaching and testing. Training is by audio-cassettes which are made by teachers experienced in Kaplan methods.

Cost: SAT $325.00 plus $50.00 refundable deposit on home-study materials
ACT $200.00 plus $50.00 refundable deposit on home-study materials
Scholarships are available for students with financial need.

VI. SETTING UP A TEST PREPARATION WORKSHOP

VI. SETTING UP A TEST PREPARATION WORKSHOP

The purpose of this section is to provide an example of a two week workshop that can be conducted to provide students with information on the content of the college admissions tests and a review of some basic academic concepts and test taking strategies.

The content of this workshop is based on the descriptions of programs provided by the public schools in Colorado and suggestions of Jerry Bobrow, Executive Director of Educational Test Preparation Services in Northridge, California.

Course Materials

Students should bring pencils (no. 2), paper for notes, and a clock for timed testing practice.

The instructor or the school should supply sample ACT and SAT tests, commercial test-preparation publications that have been identified as being valuable, and any instructor prepared materials that will facilitate the review process.

Facilities

The workshop area should be quiet, with no distractions. As much as possible the conditions that students will encounter when they take the actual test should be duplicated.

Scheduling of Workshop Sessions

Sessions should be scheduled during a time that does not interfere with the normal school activities of the students and yet at a time when the students are available. Lunch periods, last period of the day, Saturday mornings are often good possibilities.

During the school day an hour or an hour and one-half will usually suffice. On a Saturday, it is possible to cover two sessions in a period of two and one-half to three hours.

Selections of Instructors

An effective program can be set up with a math specialist and an English specialist. Both these instructors should be experienced in diagnosing student needs and be interested in conducting the workshop. It can be helpful to have a science teacher and social studies teacher participate during the sessions on Social Studies and Natural Sciences Reading.

Practice Tests

Practice tests should be administered using the time period required on the actual test.

1st Week - ACT Workshop

Session #1: Introduction

- A general overview of the course, material to bring to each session, and procedures for asking questions
- An analysis of the overall content and organization of the ACT
- Coverage of general test taking principles

Session #2 and #3: Mathematics

- Review of some basic concepts in arithmetic, algebra, and geometry
- Coverage of general strategies in preparing for and taking the math portion of the exam
- Administration of the math portions of sample ACT tests to identify specific areas that need to be reviewed
- Discussion of problems identified during the test with an emphasis on solving types of questions

Session #4: English Usage

- Review of basic grammar rules
- Coverage of general strategies in preparing for and taking the English Usage sections
- Administrations of the English Usage portion of sample ACT tests.
- Discussion of problems identified during the test with an emphasis on solving types of questions

Session #5: Reading Comprehension

- Discussion of basic principles in preparing for and taking the reading portions of the ACT test
- Practice reading the Social Studies and Natural Science Reading portions of sample ACT tests, using basic reading principles
- There will not be time to review basic concepts in science and social studies; however, students can review on their own time basic concepts from school text books or summaries usually available from college or commercial bookstores

2nd Week - PSAT and SAT Workshop

Session #1: Introduction

- An analysis of the overall content and organization the PSAT and SAT.
- A review of general test taking principles

Session #2: Mathematics

- A review of general strategies for taking the math portions of the PSAT and SAT

- A review of some general concepts in arithmetic, algebra, and geometry

- Administration of a math portion of a sample SAT. (Problems detected during the administration will probably have to be handled on an individualized basis.)

Session #3 and #4: Verbal Ability

- An analysis of each question type--antonym, analogy, sentence completion, and comprehension--in order to familiarize students with the formats of these questions

- A review of strategies for preparing for and taking each of the question types

- Administration of the verbal ability portion of a sample SAT

- Discussion of problems identified during the test with an emphasis on solving types of questions

Sessions #5: Review (ACT and/or SAT)

- A review of any major problem areas identified during the workshop.

- If the students appear to be generally confident about their ability, then this is an opportunity to administer a complete ACT or SAT test. The test should be administered under conditions as close to the actual test conditions as possible.

VII. PREPARING FOR AND TAKING COLLEGE ADMISSIONS TESTS

VII. PREPARING FOR AND TAKING ADMISSIONS TESTS

In terms of preparing for college admissions tests, there is no substitute for the student taking and doing well on semester courses offered by the high school in areas that are covered by the tests. Involvement in courses covering compostion, grammar, vocabulary development, reading, algebra, geometry, general science, biology, U.S. and world history will provide the student with the skills and knowledge needed to do well on the tests.

Students from the Detroit Country Day School in Detroit, Michigan, consistently register among the highest test score in the country. According to Dr. Jerry Hansen, Assistant Headmaster, high school students are required to study four years of English and history and three years of a foreign language. The English program consists of the study of classical literature with much emphasis on grammar and vocabulary. The vocabulary study includes coverage of analogies, antonyms, synonyms, and sentence completers similiar to SAT questions. Three years of math, including Algebra I and II and geometry, are also required for graduation. Although Dr. Hansen attributes the school's success to a strong academic program, there is also a concern for preparing students specifically for the admissions tests as reflected in the following activities:

1. The purposes and content of the tests are communicated to parents and students through assemblies, college nights, and individual counseling sessions.

2. All sophomores and juniors are required to take the PSAT. When results are known, the mathematics and English teachers review the tests with all the students, working problems and answering questions that the students didn't understand.

3. Special Saturday morning SAT prep sessions are offered where test strategies are explored and test content is examined. The teachers, who have studied, analyzed and carefully categorized the test content, teach various strategies depending on the questions from the students. Each saturday session has a tuition fee of $35.

The Colorado Rocky Mountain School, a private school in Carbondale, Colorado, requires that all juniors take the PSAT, all seniors the SAT, and all seniors and many juniors at least one achievement test. Mr. Stephen Sutton, Assistant Director of Studies, indicates that the school provides two or three sessions to go over sample tests; however, the best preparation for the tests comes from a strong curriculum. The school requires four years of English and a minimum of two years of math (geometry and algebra) for all students before graduation.

Most of the public high schools in Colorado appear to depend on their normal course requirements to prepare students for admissions tests. Relatively few schools offer test-preparation programs and those schools that do offer test-preparation courses provide them on a voluntary basis. In addition to basic required courses in English, history, mathematics, and science, some high schools offer elective courses that prepare students for the types of skills they will encounter on the admissions tests.

The high schools in Jefferson County, Colorado offer the following elective courses that deal directly with skills found in admissions tests:

American Grammars - involving the study of structured and functional grammar

Semantics - involving understanding the processes by which languages evolve and the development of critical reasoning and communication skills

Etymology - involving the development of speaking, reading, and written vocabulary skills

Composition for the College Bound - involving development of writing skills needed for success in college

Mapleton High School in Denver offers an elective two-semester course in reading and language development that includes the development of study skills, speed reading, expository writing, analysis of literature, and essay and research writing.

While public school personnel and privately employed persons who are involved in test-preparation programs concur that the best preparation is for students to be exposed to a strong school curriculum in the areas covered by the tests, they also attest to value of specific test-preparation programs. Students who take sample tests have an opportunity to identify areas that need to be reviewed before the actual test date. Exposure to testing strategies can provide students with techniques for approaching questions and can help in building confidence and decreasing test anxiety.

On the following pages are some general test-taking principles as well as some strategies for preparing for specific areas of the admissions tests. A majority of the suggested strategies were contributed by the following Colorado educators:

Ms. Mildred Gamble, Language Arts Coordinator, St. Vrain Valley Public Schools (verbal strategies)

Dr. Robert C. Hannum, Professor of Statistics, University of Denver, (math strategies)

Ms. Linda Molner, Reading Instructor, Mapletion High School (reading strtegies)

Ms. Janet E. Zamboni, Reading Instructor, Lakewood Senior High School (reading strategies)

In addition, conversations with and materials provided by the following people were extremely valuable in developing the list of principles and strategies:

Dr. Jerry Bobrow, Executive Director, Bobrow Test Preparation Services, Northridge, California

Ms. Ceel Kenny, Director, PREP INC., Denver

Ms. Diane Shames, Director, Stanley H. Kaplan Educational Center, Denver

The following publications were also available in obtaining information on preparing for tests:

Feder, Bernard. The Complete Guide to Taking Tests. Englewood Cliffs, New Jersey: Prentice Hall, 1979

Paul, Walter, and Millman, John. How to Take Tests. New York: McGraw-Hill, 1969.

Victor, John. Making the Grade... How to Take and Pass a Test. New York: The Associated Press, 1979.

The following publications provide substantial information on strategies with some approaches different from those noted in this sourcebook:

Devine, James and Devine, Judy. Strategies for Taking Tests, New York: Barron's, 1982.

Lawrence, Marcia. How to Take the SAT, New York: New American Library, 1982.

General Test Taking Principles

PRIOR TO THE TEST

Familiarity with Test

The student should read all the information about the test. Both the College Board and American College Testing Program provide comprehensive information about their tests, including location and dates of tests and details about purpose, content, and scoring.

Sample tests and information of how to prepare for tests are provided by the test publishers and a number of other publishers (see bibliography of sources). It is important for the students to practice on these sample tests in order to become familiar with the types of questions, the directions, and the physical layout of the answer sheets. These sample tests should be taken several weeks prior to the test date under timed conditions similar to those of the actual test. The questions missed on the sample tests will provide good indicators of the areas that need to be reviewed before the test.

Studying for the Test

Research on preparation for tests indicates that consistent preparation over an extended period of time is far more effective than last minute cramming. Several weeks before the test the student should begin a review based on the suggestions of teachers knowledgeable about the student's achievement and the results of the sample tests. If available, the student should take advantage of any review courses offered by the community or school.

Attitude

It will be extremely helpful if the student can remain calm and positive about taking the tests. Both counselors and teachers can contribute to a student's positive attitude by keeping the student informed about the purpose and nature of the tests, by providing the opportunities for learning in the areas covered by the test, and by encouraging the student to do his or her best. While students should consider tests important and do their very best, they should keep these tests in perspective, recognizing that other factors such as academic records, school activities, and recommendations are equally important in the admission process.

Scoring

The student should know in advance if the test has a penalty for guessing and use that information when eliminating possible responses. The SAT is scored by subtracting a fraction of each wrong answer from the number of right answers. In this case wild guessing usually doesn't result in an improved score. The student should carefully eliminate answer options because each accurate elimination increases the possibility of choosing the correct response. In the case of the ACT, where there is no penalty for guessing, a student should answer as many questions as possible based on knowledge and then go back and answer the remainder using educated guesses. Every question on the ACT should be answered.

Final Preparations

Rather than last minute cramming, it is far more important that the student get a good night's sleep and be well rested mentally and physically.

The student should get up in time to dress comfortably and eat a high protein breakfast. Before leaving for the test, the student should be sure to have the following materials.

1. An admission ticket
2. Identification
3. Several #2 sharpened pencils with erasers
4. A high protein snack
5. A large easily read watch
6. Glasses, contacts, or hearing aid, if needed

The student should arrive early enough at the site to be able to choose a seat where there is good light and ventilation and where the instructions of the proctor can be seen and heard.

The student should avoid sitting in an area where there might be distractions by noises from the outside or friends.

The student should attend to bathroom needs before the test begins, so that valuable time will not be lost later on.

Muscle relaxation, breathing, and concentration exercises can be valuable for those students whose test performance may be less than it should be because of tension. For these exercises to be effective, it is important that they be practiced well in advance of the testing day.

If the student is ill or has a physical condition that might prevent a good performance, it is important for the student to notify the proctor. The test can be cancelled and rescheduled.

DURING THE TEST

Directions

The student should read and listen to all directions, carefully. If the student does not understand the directions it is important to seek assistance from the test proctor. Underlining or circling key words or phrases in the instructions will keep the student aware of the task.

Marking Scoring Sheets

The student should fill in the answer sheet carefully, providing all the identification information requested. The answer space can be adequately marked with one heavy stroke of a #2 pencil. The student should check frequently to be sure that the number of the answer spaces corresponds to the number of the question and that there is only one answer mark for each question. If the student discovers that he/she has made a marking mistake that cannot be corrected, the testing proctor should be notified.

Using Time Effectively

Following are steps that a student can take during the test to aid in the effective use of time:

1. When the proctor indicates the time to begin, set a watch at an even hour, disregarding the actual time.
2. Add to the time on the watch the number of minutes allowed for the test section being taken and write this time at the top of the answer sheet.
3. Check to see how many questions there are before starting the test, and then calculate how much time there is for each question.
4. Check at 1/4, 1/2 and 3/4 points in the time allowed for the section being taken to be sure that test items are being covered on schedule.
5. Answer the easy questions immediately and mark the questions that are difficult but solvable with a (+) and the problems that seem impossible with a (-). After doing all the easy problems, return to the problems marked (+) and finally to the problems with a marked (-).

Strategies During the Test

Following are some basic strategies that the student can apply during the test:

1. Try to understand the intent of the question; do not read into a question qualifications and interpretations not included in the question.
2. Attempt to answer the test question before reading possible choices then look for matching answer choices.
3. Read and consider all answer options before making a selection, but quickly eliminate obviously incorrect responses or responses that do not meet the requirements of the question and focus on options that are good possibilities.
4. Cross out eliminated choices so that re-analysis of the question will not be necessary when reviewing or re-examining the questions.
5. When several answer options look good, compare them to find out what makes them different.
6. Be careful of specific determiners in questions such as rarely, usually, always, none, which may qualify the statements in the question.
7. Do not hand in a test early; use the extra time to re-examine unanswered questions. Avoid changing answers unless the changes are clearly needed.

Following the Test

Following are some suggestions to the students on what to do following the test:

1. Save the registration number on the admissions ticket in case there are questions about the test following the examination.
2. If illness or some other physical disability has interfered with the results, the student should notify the proctor and follow instructions for notifying the testing company of the cancellation of the test results.
3. The student can request information on the scoring of his or her test. If the student has evidence of an error in scoring, a rescoring of the test can be requested.

Math Sections of the ACT, PSAT, and SAT

Mathematics Usage Sections of the ACT, PSAT, and SAT

There are 40 math items on the ACT test, measuring the ability of the student to demonstrate various skills in arithmetic, algebra, and geometry. The items are in a multiple-choice format. The student is given a problem and then asked to select one correct answer out of five possible choices. The background necessary to do well on this test includes basic arithmetic skills in number operations, fractions, decimals, and averages as well as experience with high school algebra and geometry. The ability to solve written problems in any of these areas is absolutely necessary.

The PSAT contains 33 standard multiple-choice math items and 17 quantitative comparisons for a total of 50 items. The SAT contains 40 standard items and 20 quantitative comparisons for a total of 60 items.

On the following pages are some strategies for preparing for and taking the Mathematics Usage sections.

Reducing Test Anxiety

A case of "math anxiety" tends to inhibit the mind from the kind of clear logical thinking required for solving mathematical problems on admissions tests and leads to results that measure something other than the student's ability in mathematics. Practicing problems and acquiring test-taking strategies before the actual test are beneficial in helping students become comfortable and confident about their math ability.

Preparing for the Test

The student should practice doing problems from samples of the actual tests. An emphasis on solving problems using logical reasoning rather than memorizing formulas or collections of techniques is extremely important. The subject of mathematics should be viewed as a way of thinking in which mathematical symbols are the language that mathematicians use to communicate their ways of thinking. While it is important to take note of the details in a problem during the preparation work, it is far more important to understand the general approach or steps taken in reaching a solution.

By comparing approaches used in different problems, students can gain insight into techniques of logical reasoning. The practice sessions on sample tests will probably reveal a need to review some basic arithmetic skills or concepts in algebra and geometry.

Order of Solution

The first step in taking any math test is for the student to quickly estimate whether the problem will be easy to solve, moderately difficult but solvable, or very difficult to solve. The student should first solve the easy problems and then return to work on the moderately difficult problems. If there is enough time left after doing the easy and moderate problems, the student can concentrate on the very difficult ones.

Understanding the Question Being Asked

After reading through the problem once to determine the difficulty, the student should go back and focus on the question and determine precisely what he or she is being asked to do. Many students with the technical knowledge to solve a problem get the answer wrong because they answered a question different from the one being asked. It is helpful if the student underlines key terms or phrases which provide clues as to what is required by the question.

Finding a Method to Solve the Problem

During the second reading of the question, the student should determine the steps that need to be taken to solve the problem. Following are some suggestions that may be helpful to a student in determining these steps.

1. Try to recall similar problems that were encountered during class time in school or during preparation sessions, and the steps that were used to solve these problems.

2. Draw or completely label a sketch or diagram of the problem described in the question. The drawing may suggest a procedure for dealing with the problem.

3. Underline key terms, words, or data given in the question.

4. Examine the answer options; sometimes the options will suggest a method of solution.

The student should always use powers of reasoning and common sense and recognize that most problems can be solved in a number of ways.

Carrying Out the Procedure

When a problem involves units of measurements the student should carefully examine the units stated in the problem and units required in the answer. Very often these problems require some type of conversion.

For example, if a question asks for the area of rectangle in square feet and the dimensions of the rectangle are given in inches, the student must make conversions from inches to feet at some point during the calculations.

With problems stated wholly or partially in terms of letters (e.g., if p pencils cost c cents, how many can you buy for d dollars?) the student can first try solving the problem with numbers in the place of letters. Once the student sees the logic of the solution using numbers, then the student can go back and solve the problem using the letters. In the same respect small numbers can be substituted for large numbers in a problem to ease the difficulty of solution.

Checking the Answer

During the solution of a problem the student should make occasional checks to see if the steps in the solution are reasonable. Following are some suggestions for conducting these checks.

1. Check to see if the answer is reasonable in terms of the nature of the question.
2. Check to be sure that all key data or vital information in the problem was considered and that any diagrams were accurately labeled.
3. If possible, make an estimate of an answer which can be compared with the actual calculations. If the estimate and calculations are not close, this discrepancy may indicate an error in the procedure or calculations.
4. If the answer doesn't appear to match any of the answer options, look for simple or obvious errors before completely reworking the question. Leaving out a zero, making a simple calculation error, placing a decimal point in the wrong place, or skipping a step in the procedure are examples of errors that can usually be easily corrected.
5. In case the item needs to be reworked, consider working independently of the first solution, using a different way of solving the problem so that errors are not repeated. Examples of alternative methods would be using decimals instead of fractions or reversing the order of calculations.

Quantitative Comparison Sections of the PSAT and SAT

A portion of the PSAT and SAT math sections measure the ability of students to quickly compare two given quantities. The student is presented with two quantities, one in Column A and one in Column B. Then the student must select the one statement out of the four following statements that correctly describes the relationship between the given quantities:

(A) if the quantity in Column A is greater than the quantity in Column B
(B) if the quantity in Column B is greater than the quantity in column A
(C) if the two quantities are equal
(D) if the comparison cannot be determined from the information given

It is important for the student to recognize that the approach to solving quantitative comparisons is somewhat different from the approach to solving problems in the Mathematics Usage section. Long and involved calculations are not necessary. The calculations are generally simple and the emphasis is on the student being able to reason and make approximations. Following are some suggestions for approaches to quantitative comparisons:

1. Always consider both columns before making any calculations.

2. If it is not possible to make a complete comparison, then examine the figures in each column part by part.

3. Substituting small or familiar numbers for letters or large numbers can aid in the solution.

4. Simplifying the figures in one or both columns (e.g. combining terms, reducing fractions) can make an answer evident.

5. Drawing diagrams can help in recognizing the nature of the comparison.

Reading Passages of the ACT, PSAT, and SAT

Areas Covered in Reading Passages

Approximately one-third of the questions on the verbal sections of the PSAT and SAT tests are based on reading passages. The contents of these passages cover a wide range of subject areas and topics. The student is presented with a reading passage and then asked to answer a series of multiple-choice questions, using only the stated or implied information in each passage. The PSAT and questions focus on determining the ability of students to understand, interpret, and analyze reading passages on a variety of topics, and students who have read widely and can read efficiently tend to do well on the reading sections of both tests.

There are two major portions of the ACT test which are considered reading tests -- Social Studies Reading and Natural Sciences Reading. In the Social Studies area students are presented with passages that can be taken from any of the social science disciplines: anthropology, economics, history, philosophy or political science. The questions that follow a particular passage can be based solely on the information provided in the passage or can be based on a combination of the information in the passage and the general knowledge of the student. The Natural Science portion of the test has passages that can be taken from any of the science disciplines: astronomy, earth science, biology, chemistry, or physics. The questions following the science passages require the ability to read analytically as well as a general knowledge of science. The students who have taken social science and natural science courses in school and who have read widely in both fields tend to do well on the reading portions of the ACT.

General Suggestions for Preparation

The best preparation for the reading portions of the ACT and SAT tests is for the student to be an active reader who enjoys reading and has read extensively. Special courses on reading provided by many high schools can also provide the opportunity for the student to read effectively and efficiently.

These reading courses, as well as instruction in reading development provided as a part of regular course offerings, can involve students in the following activities that are particularly valuable in preparing for college admissions tests:

- The development of content area vocabulary through analysis of word structure (prefixes, roots, suffixes) and practice in using context clues
- The development of techniques to improve reading rate and comprehension
- The development of skills in reading maps, graphs, and diagrams

A student cannot learn to read effectively at the last minute, however, a reveiw of the reading portions of sample tests can be valuable in giving students experience with the types of passages and questions presented on the actual tests. This review should start three to four weeks prior to the test date and should involve the types of materials that are covered in full length ACT and SAT tests. The student should do the review at a fairly rapid rate without attempting to memorize facts. The primary purpose of review is to renew the signals to the brain so that prior information on reading techniques and knowledge about various subjects can be recalled.

It also can be valuable for the student to review specially prepared sheets which cover major events or concepts from various disciplines (these are available at most college bookstores).

Practice reading from Time, Newsweek, Omni, Discover, and other appropriate magazines can provide students with practice in reading the types of articles that often appear on admissions tests. The readings from these magazines should be related to social science and natural science areas covered by the admissions tests.

Specific Suggestions in Preparation

An analysis of a number of sample tests will provide a student with specific information about the number and length of passages and the types of topics covered in the actual tests. It will also help the student in recognizing whether the answer required is "stated" or "implied."

When dealing with "stated" test items, the student will find the answer in the passage itself. Examples of these types of questions are as follows:

> "According to the information in the passage, which of the following groups within a society would be most likely to start a revolution?"
>
> "According to the passage, biology did not fully adjust to Darwin's theory until..."
>
> "According to the passage, for which of the following reasons did we exploit the land?"

When dealing with "implied" test items, the student must incorporate important contextual clues from the passage into his or her own thinking, and infer the answer. Examples of these types of questions are as follows:

> "Judging from the passage, which of the following would the author most likely favor?"
>
> "The tone of the passage might best be described as which one of the following?"
>
> "It can be inferred that the ancient's atomic theory was based primarily on which of the following?"

Having a student practice identifying specifically where the answer can be found or specifically what clues are needed to derive the answer has the effect of sensitizing students to the nature of the performance expectations they are addressing in the reading comprehension sections.

Taking the Test

When taking the test, a student should have these goals:

- ° to read well enough to understand the questions
- ° to attempt to answer all the questions and
- ° to fininsh the test on time

These can be accomplished with planning and concentration. It is important for the student to follow the preparation strategies suggested in the General Principles of Test Taking section previously covered (e.g., finding a seat in an area that is comfortable and away from any distractions).

There are a number of approaches to taking a test in reading that can be investigated by reading various publications on test taking or by taking a course in reading development. Following is one such approach involving previewing, reading, and reviewing.

Previewing - The purpose of this stage in the process is to quickly determine the major topics covered and the overall organization of a passage, as well as the general nature of the questions. It involves reading the first sentence of each paragraph and skimming over the rest of the materials in the passage, and quickly reviewing the questions. This process should take no longer than one or two minutes.

Reading - The purpose of this stage is to discover the main idea, detailed structure, stages in the development of the author's thought, relationships of ideas expressed. The student should concentrate on those paragraphs or sections of paragraphs that are closely related to important topics or the main idea of the passage. In this process the student should use any rapid reading techniques that he or she has successfully utilized in the past. Reading techniques that are useful in obtaining both speed and comprehension usually need to be practiced well in advance of any testing situation. It may be helpful for the student to underline important details, draw lines between related ides, or make notes about important ideas. A majority of the student's time should be spent at this stage. However, it is important for the student to gauge the time that can be spent on each question and not spend too much time on any one question. Questions which appear to be very difficult to answer should be marked and left for the review stage.

Reviewing - If there is time the student should spend a few minutes reviewing those questions or answers that were in doubt. However, it is important for the student not to change original answers unless there is concrete evidence that verifies the need to make a correction. In dealing with very difficult questions, the student should review the questions carefully to make sure that the intent of the question is understood. Quite likely the question requires some type of inference and the student needs to consider the major points in the passage previously identified and his or her knowledge about the subject.

Additional Considerations in Preparing for Tests

1. The personal attitudes of the student should not enter the question-answer process. The student is being tested for the ability to examine the information objectively.

2. Numerical data should be understood not only for what it actually represents but also for its relationship to other data in the passage. In the case of statistical data the student should look for trends and the relationship of these trends to important ideas in the passage.

3. The student should carefully consider any comparisons or contrasts in the passage for they are often the basis for both questions and answers.

4. The student should underline qualifying words such as "this," "as a result," and "in which case." Qualifying words such as these are often signals that a main point is being made.

5. Using the "5 W's" -- who, what, when, where and why, -- can often help a student identify critical information in a reading passage.

Verbal Sections of the PSAT and SAT

Antonyms

There are 20 antonym items on the PSAT and 25 antonym items on the SAT. Each antonym question consists of a word in capital letters, followed by five lettered words or phrases. The student is asked to choose the word or phrase that is most nearly opposite in meaning to the word in capital letters.

The antonym sections of both the PSAT and SAT contain a mixture of adjectives, verbs, and nouns. All five choices are the same part of speech as the word presented in capital letters. Training for the test begins as soon as students begin to develop their vocabularies. The more words students know, the better they will perform on the verbal segments of the PSAT and SAT. The entire K-12 programming should contain a strong vocabulary-building strand. In addition to taking school courses related to vocaculary development, the student can prepare for the antonym portion of the tests by:

- studying various vocabulary lists
- associating new words in review readings with a particular context
- studying the meanings of word roots
- using a dictionary to look up new words encountered in review readings

To prepare students for individual antonym items, teachers should provide some background training in distinguishing among the three parts of speech tested.

Activity: Given mixed lists of adjectives, verbs, and nouns, students utilize structural clues to categorize them by parts of speech.

A study of adjective suffixes from words included in released sample tests indicates that these include -able, -al, -ious, -and/-ent, and -y with regularity. One example of each of these can be seen in this listing: affable, germinal, capricious, ebullient, and giddy.

Verbs are given in the present form. A quick check to see if the word will readily receive the -ed, or -ing suffix helps to identify verbs. Examples from tests are these: intensify, enhance, denounce, and spurn.

Most nouns used in the tests are abstract, presenting concepts or conditions. The suffixes -tion, -ness, and -y appear among these nouns: retraction, hardiness, and insularity (the y is generally blended with a consonant). Some nouns refer to persons: parasite and atheist.

In life, words are encountered in context rather than in isolation. The prospective test-taker can be assisted in developing a contextual framework by which antonyms can be solved. Following are various activities for the students and illustrations of solutions of sample antonym questions.

Activity: Given an adjective-antonym test item, students learn to use a test-frame sentence to locate the answer which is most nearly opposite from the first word presented.

TEST ITEM: ZANY: (A) impious (B) friendly (C) solemn
(D) unyielding (E) uninformed

Test-frame sentence:

The person(s) is (are)__________, not____________.
place(s) was (were)________, not____________.
thing(s)
concept(s)

Processed sentence:

The Marx brothers were ZANY, not SOLEMN.

Activity: Given a verb-antonym test item, students learn to use a test-frame sentence to locate the answer which is most nearly opposite from the first word presented.

TEST ITEM: EXTOL: (A) defame (B) alienate (C) conceal (D) refrain (E) reject

---

Test-frame sentence:

A (group) can ________....., or a (group) can ______ .....
(person) (person)

Processed sentence:

An employee can EXTOL the virtues of the employer, or an employee can DEFAME the employer.

Activity: Given a noun-antonym test item, students learn to use a test-frame sentence to locate the answer which is most nearly opposite from the first word presented.

TEST ITEM: RETRACTION: (A) condolence (B) reaffirmation (C) final decision
(D) obvious mistake (E) harsh judgement

The union boss issued a RETRACTION, not a REAFFIRMATION.

Note: There is no single "generic" test frame-sentence for processing nouns. Nouns can function as subjects or as objects. (In the sentence above, the capitalized words are functioning as direct objects.) Because of this difficulty with nouns, students can learn to transform nouns to adjectives or verbs and then use the appropriate test-frame sentence.

The principle can RETRACT his statement about football, or he can REAFFIRM it.

In the example above, RETRACTION has been transformed to the verb RETRACT and REAFFIRMATION has been transformed to the verb REAFFIRM.

The lifetime process of vocabulary building cannot be accomplished during any short-term intense test-preparation course. Since, in all probability, there will be some words on the exam that are absolutely alien to the student, he/she should be aware that the most difficult words are at the end of each antonym section. Since the PSAT/SAT scoring utilizes a correction formula, penalizing a student for guessing incorrectly, the student should know that omissions might be desirable at those specific locations in the exam.

Sentence Completions

There are 15 sentence completion items on the PSAT and 15 sentence completion items on the SAT. Each sentence completion question consists of a sentence with one or two blanks. Beneath the sentence are five lettered words or sets of words. The student must select the word or set of words that best fit the meaning of the sentence as a whole.

Because the test items themselves provide a contextual framework for processing thought, students should be trained to scrutinize the sentence, alert to any helpful clues. Following are some representative examples used to demonstrate the process of looking for contextual clues:

TEST ITEM: The people were tired of reform crusades; they wanted no part of an idea that might turn into a _______________.

(A) respite
(B) reality
(C) necessity
(D) mistake
(E) cause

Analysis: The two clue words are reform crusades. Because the second clause is clarification or restatement of the first clase, a synonymous relationship exists between them. A cause is the singular form of reform crusades.

TEST ITEM: Food and sex are very basic requirements of animal life, but certain hermits eschewed sexual activity altogether and ______________ food consumption to the lowest point ______________.

(A) limited . . injuriuos to
(B) cultivated . . vulnerable to
(C) reduced . . compatible with
(D) devoured . . recorded for
(E) expanded . . helpful for

Analysis: The word but sets up a contrastive relationship between the two clauses, enabling the student to process the word eschewed as gave up, a natural combination with altogether. Since the opening clause names two subjects and elevates both in importance, the contrastive word but demands a lesser degree. Choice A, limited, or choice C, reduced, satisfies this requirement. The prepositional phrase to the lowest point demands the verb reduced. The verb limited would necessitate changing the prepositional phrase to be to the least amount.

By first demonstrating such analyses to students, the teacher-coach can sensitize them to the nature of the task expectation. Gradually, as the instructional program advances, students should engage themselves in such analyses through oral verbalization.

Analogies

There are 15 analogy items on the PSAT and 20 analogy items on the SAT. In each analogy item the student is given a related pair of words or phrases and then asked to select from five sets of pairs the pair that best expresses a relationship similar to that in the original pair of words.

The analogy question is testing something beyond mere knowledge of words: it is testing the students' ability to recognize relationship between words or ideas. In every case the strategy of the student should be to define the relationship as precisely as possible.

There are two basic strategies in solving an analogy item. Following are two sample test items demonstrating the two strategies involved in solution of the analogy.

TEST ITEM: LEMON: FRUIT:

(A) author:symposium
(B) branch:tree
(C) poetry:prose
(D) hammer:tool
(E) partner:syndicate

Strategy 1: Name the relationship existent between the two words. Remember to read the single colan as is to; the double colan as as.

ONE OF A GENERIC GROUPING (LEMON) is to THE ENTIRE GENERIC GROUPING (FRUIT) as

ONE OF A GENERIC GROUPING (HAMMER) is to THE ENTIRE GENERIC GROUPING (TOOLS)

Strategy 2: Create a sentence containing two blanks, incorporating the two words in the sequence given and in a manner indicating the nature of the existent relationship.

A ___lemon___ is one of a grouping known as ___fruit___.

A ___hammer___ is one of a grouping known as ___tools___.

TEST ITEM: MELODEON: ORGANIST:

(A) reveille:bugler
(B) solo:accompanist
(C) crescendo:pianist
(D) anthem:choirmaster
(E) kettledrum:tympanist

Strategy 1: Name the relationship existent between the two words.

A MUSICAL INSTRUMENT (MELODEON) is to ITS PERFORMER (ORGANIST) as

A MUSICAL INSTRUMENT (KETTLEDRUM) is to ITS PERFORMER (TYMPANIST)

Strategy 2: Create a sentence containing two blanks, incorporating the two words in the sequence given and in a manner indicating the nature of the existent relationship.

A ___melodeon___ is played by a(n) ___organist___.

A ___kettledrum___ is played by a(n) ___tympanist___.

Verbal Sections

The analogy items test the student's ability to see relationships. Near the end of any given analogy section of the exam, the student may encounter some items where the words themselves are not part of the student's recognition vocabulary. At that point the student is blocked in processing the items, not because of an inability to see relationships but because of a vocabulary limitation. Because of the correction formula used in scoring the SAT, the student should omit those analogy items dealing with unfamiliar words.

The English Usage Section of the ACT

In 1981 the American College Testing (ACT) Program released three sample test booklets, identified as 8120C, 8121B, and 8121C. With these complete tests to use for analysis and coaching purposes, some observations regarding the forty minute, seventy-five question English Usage section of the examination can be made.

The exam is structured in a double-column format. The right-hand column, double spaced, contains a series of prose passages, generally seven, identified by Roman numerals rather than by titles. Within each passage, certain portions are underlined, with these underlined segments numbered sequentially from one to seventy-five to correspond to the numbers of the test items located in the left-hand column, each item positioned laterally from the underlined portion it addresses. The number of items for each passage varies from eight to sixteen, but the total for the test is always seventy-five.

Each test item has four choices of answer: A-B-C-D or F-G-H-J. Choice A or F is always NO CHANGE. Occasionally choice D or J is OMIT. All other choices are revisions of the underlined segment of the prose passage. The instructions indicate that the test taker is to "choose the one that best expresses the idea, makes the statement appropriate for standard written English, or is worded most consistently with the style and tone of the passage as a whole." The student is advised to "read each passage through once" before beginning to answer the questions.

Although the passages are not titled, they could readily be given topical titles by the student as a means of determining their nature. These proposed titles, based on the passages contained in simple test 8121B, are representative and reveal the expository nature of the passages upon which the English Usage questions are based:

Transplanting a Cactus
Removing Tree Stumps
Culturally Sensitive Travelers
Creating Job Titles with Dignity
The Nobel Prize for Literature
James Baldwin: A Twentieth Century American
Choosing a Bike

The main skills being tested are editing and proofreading. Students who have, through their instructional programs in composition, been trained in editing and proofreading should feel comfortable with the format of the exam. Those students who also have a good understanding of the conventions of standard written English and have experienced the technique of classifying errors (miscue analysis) as a means of understanding what corrections are needed in the copy being edited will feel even more comfortable with the exam format. The English Usage test includes five elements of effective expository writing with a relatively uniform distribution pattern from test to test. According to ACT published information, the approximate proportions of this distribution are indicated in the following chart:

Element of Standard Written English	Proportion of Test	Number of Items
A. PUNCTUATION	.17	13
1. Commas		
2. Colons		
3. Semicolons		
4. Dashes		
5. Hyphens		
6. Parentheses		
7. Quotatin marks		
8. Question marks		
9. Exclamation marks		
B. GRAMMAR	.18	13
1. Subject-verb agreement		
2. Pronoun-antecedent agreement		
3. Adjective-adverb choice		
4. Conjunction choice		
C. SENTENCE STRUCTURE	.25	19
1. Relationship between/among clauses		
2. Placement of modifiers		
3. Parellelisms		
4. Shifts in construction (person/verb tense)		
D. DICTION AND STYLE	.23	17
1. Precision in word choice		
2. Appropriateness in figurative language		
3. Economy in writing		
E. LOGIC AND ORGANIZATION	.17	13
1. Organization of ideas		
2. Paragraphing		
3. Transitions		
4. Unity		
5. Coherence		

With cross-referencing to the analysis chart, it is possible for the instructor-coach to assist students in analyzing each incorrectly-answered test item in a manner similar to that demonstrated through the following representative items selected from the ACT-released examinations.

Moreover, one pad was damaged by a deep split with a line of gray fiber sealing its edges, and the whole plant
5
leaned forward.

5.*A. NO CHANGE
B. it's edges;
C. its' edge,
D. their edge;

Analysis: The antecedent of its is pad. Its is a possessive pronoun, not to be confused with it's, the contraction for it is. There is no such word as its'. Since pad is a singular antecedent, the possessive pronoun their would violate the agreement principle. When the coordinate conjunction and is used to join independent clauses, it is generally preceded by a comma. *Answer to item 5 is A.

Cross-reference to analysis chart: A1, A3, B2, D1

America the world's richer agricultural
10
country, was once largely covered with forests. Needing both timber but also
11
farmland, settlers felled trees and removed stumps. . . .

10. F. NO CHANGE
*G. America, the world's richest
H. America the world's richest
I. America, the world's most richest

11. A. NO CHANGE
B. as well as
*C. and
D. along with

Analysis: A non-restrictive appositive is set off by commas. One comma is present in the text; the other needs to be inserted. The er ending on the adjective rich signals the comparative degree; the est ending signals the superlative degree, the one needed in the sentence. Most and est and not used concurrently. *Answer to item 10 is G.

Cross-reference to analysis chart: A1, B3

Analysis: The correlative conjunctions are both.. and, either..or, neither..nor, not only..but also. Since both is in the text, and is needed to complete the correlative. *Answer to item 11 is C.

Cross-reference to analysis chart: B4

Pearl Buck's selection, whose Chinese
50
peasant novels had not established her
among critics as "literary," also
evoked a storm of protest.
51

50. F. NO CHANGE
G. Pearl Buck's winning,
H. The Pearl Buck choice,
*J. The selection of Pearl Buck

51.*A. NO CHANGE
B. projected
C. was evocative of
D. was provcative of

Analysis: The word whose, positioned where it is as the first word of a non-restrictive adjective clause, dictates that a noun must precede it and that the noun must be the one to whom the word whose refers. With F in place, selection is the noun; with G in place, winning is the noun; with H in place, choice is the noun' with J in place, Pearl Buck is the noun. Answer to itme 50 is J.

Cross-reference to analysis chart: B2, C2

Analysis: Choices A and B are both in the active voice; choices C and D in the passive. Generally, active, voice is preferred. There is also a word choice to be made. Evoke means to call forth or draw out. Project means to send forth. The verb transform of provocative is provoke, meaning to excite or anger. *Answer to item 51 is A.

Cross-reference to analysis chart: D1

The skills needed to test well on the English Usage section of the ACT are best learned in a composition-based curriculum, most particularly in those classes that stress editing and proofreading and expect students to learn the concepts that dictate standard written English. Punctuation, grammar, sentence structure, diction and style, and logic and organization--the test elements--are best learned within a composition program, as students encounter writing situations where such knowledge is needed.

A program designed to prepare students specifically for the English Usage section should serve two main purposes: (1) to acquaint students with the format, timing, and scoring of the exam itself; (2) to review, in a new setting, the skills needed for effective editing and proofreading. The three ACT-released examinations provide substantive and motivational instructional material because they are "real" exams. Materials by themselves do not, however, a program make. The key ingredient is still the teacher.

If a district or school is considering providing special programming for potential test takers, it would be incumbent upon that district or that school to select the teacher in a manner similar to that employed when selecting a football coach. Coaching students for high-level performance in the competitive arena of college admissions exams is a specialized skill. Teachers who desire to become these new-wave coaches may rightfully expect that the district will help them to acquire the skills they need for successful coaching.

VIII. TEST PREPARATION MATERIALS

VIII. TEST PREPARATION MATERIALS

In a previous chapter the materials available from the American College Testing Program and the College Board were described. In this chapter some of the materials available from other sources are described. These materials are representative of those frequently used in test-preparation programs in Colorado or are the works of publishers who responded to the State Department's request for information. While the writer of the sourcebook has reviewed these materials in order to describe them, no judgments were made about the comparative value of the materials. The responsibility for selection should rest with the person purchasing the materials.

One of the best ways of selecting test preparation materials is get the recommendation of a friend or teacher who has used such materials. Another way to determine the value of a particular publication is to compare it with a number of other publications dealing with the same subject. The publishers of test-preparation materials are usually willing to provide an examination copy, particularly if the request comes from a school or professional organization.

A student, parent or teacher interested in test preparation can usually get to review some of the materials by contacting the State Department or a school that has utilized test preparation materials. Materials can also be found in a public or university bookstore or library. For example, the Auraria Campus Bookstore in Denver has an extensive collection of test preparation materials that cover many of the achievement, undergraduate and graduate admissions exams.

Dr. Jerry Bobrow, Director of Test Preparation Programs, Office of Continuing Education, California State University in a publication entitled: **A Consumer's Guide to College and Graduation Entrance Exams Preparation Courses** makes the following suggestions regarding the selection of materials:

1. Make sure the materials are up-to-date. There are occasionally changes in test formats and question types and the person selecting materials should match the materials with the latest information on test formats and question types published by the testing company.

2. Make sure that the materials contain complete practice tests with answers and full explanations which can be understood.

3. Make sure that there is a careful analysis of each question type. It is important for the student to identify the characteristics of question types and know solution approaches to these types rather than concentrating on individual questions which may not appear on an actual test.

4. Make sure that the materials cover general test taking strategies for each section as well as the total test that help in reducing test anxiety.

5. Make sure that the materials are not padded with extraneous materials. The student needs to concentrate on a review of critical concepts and strategies and shouldn't be overwhelmed with unneeded information.

Publications On Preparation for College Admissions Tests

National Association of Secondary Principals (NASSP)
1904 Association Drive
Reston Virginia 22091

NASSP is a national association of principals, assistant principals, secondary school supervisors, and others with an interest in secondary education. The association also offers institutional and student memberships. NASSP provides expert advice and research on a range of subjects including legal issues, accountability, regulations, evaluation, administrative contracts, and urban issues. The Association is also involved in assisting various student organizations and exchange programs.

NASSP has developed materials (workbooks, video tapes, compute programs) to help students learn the concepts tested on the SAT and develop their test-taking abilities. According to NASSP these materials have been available for public schools so that all students will have access to test preparation materials, not just those whose parents can afford tuition for commercial programs. Following is a description of the materials available from NASSP that are related to preparing for College Admissions tests.

Student Verbal Workbook (172 pages)

This verbal series consists of an orientation section, five verbal lessons, two lessons on preparation for the TSWE, and a full-length (85 question) simulated SAT Verbal Examination. These lessons are designed to build self-confidence, refresh cognitive skills, and give the student practice in working with test questions. Each of the five verbal lessons contain the following sections:

- An abridged simulated examination divided into four segments: opposites, sentence completion, analogies, and reading comprehension

- Skill builder lessons designed to reinforce the essential skills for sentence completion and reading comprehension

- Vocabulary building lessons focusing on:

  (1) acquiring essential words, (2) learning important prefixes, roots, and suffixes, (3) acquiring the meanings of words from context, (4) studying etymology, and (5) examining a word's denotative and connotative values

- A vocabulary building check test that permits the teacher to monitor the progress of students in building vocabulary

The lessons in TSWE reinforce basic principles of grammar, usage, diction, and idiom as well as more complex writing problems such as logical comparisons and sentence constructions.

COST: $5.50 each

Teacher's Manual (105 pages)

This manual outlines for the teacher approaches that can be utilized in conjunction with the student workbook. Two formats are outlined one--for use with videotapes and one without videotape. There is information on presenting an orientation, using the verbal series, introducing reading comprehension, and studying vocabulary. Each verbal lesson has suggestions for introducing an aspect of language such as vocabulary, etymology, lexicography, or sentences. The introduction is followed by suggestions for analysis of questions in a simulated verbal exam, test-taking strategies, teaching skill and vocabulary builders, and taking a vocabulary check list. Finally there are suggestions for teaching skills needed to take the TSWE.

COST: $10 a copy

Videotapes

The videotape component consists of nine lessons, each 58 minutes in length. Students are advised to complete the various exercises in the student workbook before viewing the corresponding videotapes.

Each video tape:

- Demonstrates methodolgy
- Provides explanations for the answers
- Teaches etymology
- Develops test-taking abilities
- Reviews questions in the student's text.

The orientation lesson:

- Explains the purpose and nature of the SAT
- Explains how to use the workbook
- Illustrates segments of the SAT
- Discusses test-taking skills
- Presents a brief history of the English language
- Reviews procedures to build vocabulary

The five verbal lessons:

- Review questions and answers in the skill builder, the vocabulary check test, and the simulated SAT.
- Discuss test-taking techniques
- Teach reading comprehension skills and techniques of analysis
- Present etymology

The two Tests of Standard Written English:

- Review usage quetions
- Review sentence correction questions
- Teach grammatical concepts

The review lesson:

- Analyzes and discusses all questions and answers in the full-length simulated test.

COST: $761.00

Computer Programs

Computer disks are available in Apple Soft (32K) - Programs for the TRS-80 and Commodore Pet will be available in 1983. The computer program features:

- Critical thinking skills
- Multi-level approach
- Self-pacing
- Constructed response analysis
- A detailed explanation of each possible response

The computer programs consist of three full-length simulated verbal tests. A built-in management system permits automatic scoring. Each test contains the following subsections:

- 25 Opposites:
  - general definitions
  - fine distinctions

- 15 Sentence Completions:
  - one-word contextual relationships
  - two-word contextual relationships

- 20 Analogies:
  - concrete relationships
  - abstract relationships

- Reading Comprehension (5 passages, 25 questions):
  - main idea
  - supporting details
  - application
  - inference
  - special devices

- Test of Standard Written English:
  - usage - 35 questions
  - sentence correction - 15 questions

Cost: $175.

NASSP also publishes other materials which can be valuable in preparing for college admissions. Following are descriptions of these materials.

hm Study Skills Programs

Each program contains units covering the following skill areas: paragraph structure, study habits, use of time, listening, note taking, vocabulary, textbook learning, memory and test taking.

The student text can function as a classroom workbook and also serve as a resource and reference throughout.

Guidelines For Improving SAT Scores (1978)

A monograph discussing the academic and test preparation practices of schools around the country with stable or rising SAT scores.

AMSCO School Publications
315 Hudson Street
New York, New York 10013

Mathematics for the College Boards by Barnett Rich
This book is intended to prepare students for the mathematics sections of the PSAT and SAT. Includes reviews of arithmetic; monomials and polynomials; first-degree equations; problem-solving; rations/proportions/variations; plane geometry and graphing. ($7.20)

Vocabulary for the High School Student by Harold Levine
This book offers insights, procedures, and materials for a program of vocabulary building including enlarging vocabulary through central ideas, anglo-saxon prefixes, Latin prefixes and roots, Greek word elements, and derivatives. There are also units on understanding word relationships and word analogies as well as determining meanings from context. Each unit begins with a pretest and includes a comprehensive exercise to develop mastery. ($4.67 paperback)

Vocabulary for the College-Bound Student by Harold Levine
The primary aim of this book is to provide help for high school students seeking to enlarge their vocabularies. The book provides information on learning words from context, building vocabulary through central ideas, words derived from Greek, Latin, Classical Mythology and History; Anglo-Saxon vocabulary; French and Italian words in English, and expanding vocabulary through derivatives. ($4.67 paperback)

ARCO PUBLISHING, INC.
Educational Division
219 Park Ave. South
New York, New York

Scholastic Aptitude Test (SAT) by Saunders, Brigette, Friedman, Gabriel, P., Copodice, Leonard J., Halles, Margaret A., Editors
This book provides review materials for the SAT with six full-length practice exams. All sample tests, patterned after the actual exam, are provided with detailed explanatory answers to reinforce learning. Each exam gives scoring and evaluatory charts for self-assessment and for measuring progress in each SAT test area. The practice sections instruct as well as review, and suggest techniques for answering questions, common errors to watch for, and methods for estimating or guessing. ($6.95)

PSAT-NMSQT by Eve P. Steinberg
This new edition of PSAT-NMSQT includes four full-length sample exams which closely parallel the actual exam. Includes hints on handling each type of verbal question including antonyms, sentence completions, verbal analogies, and reading comprehension. There is a mathematics review covering fractions, decimals, percents, fractional and mixture problems, profit and loss, interest, taxation, ratio and proportion, work problems, distance problems, geometric figures, series, symbolic arithmetic, algebra and plane geometry. (6.00)

Other related publications include:

Mathematics Work Book for the SAT by Brigette Saunders (6.00)
Verbal Workbook for the SAT by Gabriel Freedman and Margaret Holler ($6.00)
American College Testing Program by Eve Steinberg ($6.95)
Test of Standard Written English by the Arco Editorial Board ($3.95)
The College Board's Examination by McDonough, and Hansen ($5.00)
Scoring High on Reading Tests ($5.00)
Vocabulary Builder and Guide to Verbal Tests ($5.95)
Taking Tests and Scoring High ($7.00)

BARRON'S
113 Crossways Park Drive
Woodbury, New York 11797

How to Prepare for the American College Testing Programs (ACT) by Sharpiro, Obrecht, Rifkind, Bright, Nucholls.

This guide includes full details on registration, test schedules, fees, test results plus self-scoring charts, four simulated test batteries with answers, test taking hints and a "13 Point Plan" that advises students on how to choose a college. ($7.95)

How to Prepare for the PSAT/NMSQT by Samuel C. Brownstein and Mitchel Weiner.

This guide includes information about the content of the PSAT and a diagnostic test with answers and explanations. It provides drill in verbal skills, reading comprehension, and mathematics and includes five PSAT/NMSQT type tests with answers. ($5.95)

Barron's How to Prepare for College Examinations (SAT) by Brownstein, and Weiner.

The book provides an in-depth review and practice materials for both the verbal and math portions of the SAT, with emphasis on skill building and familiarity with question types. The authors furnish study hints, test taking strategies, and other information about the nature of the tests. Grammar is reviewed for the Test of Standard Written English. Students can measure their progress on a diagnostic test and six full-length practice tests modeled after the SAT. All answers are explained. Also included are eight model achievement terst.

Strategies for Taking Tests by James H. Devine and Judy Devine

This text helps the student get acquainted with question types used on standardized exams. The book tests each question type in depth and offers advice for the test taker. Includes full-length practice versions of the SAT, PSAT/NMSQT, ACT, GMAT, LSAT, GRE and MAT. ($7.95)

Other related books published by Barron's include:

Barron's How to Prepare for the Test of Standard Written English (TSWE) by Weiner and Green. ($5.95)

Basic Tips on the ACT by Obrecht, Rifkind, Bright and Nucholls ($2.95)

How to Prepare for the College Board Achievement Test (CBAT) Series ($6.95 to $4.50)

Basic Tips on the SAT by Brownstein and Weiner

The Art of Test Taking by Karl Weber ($4.95)

How To Beat Test Anxiety and Score Higher on the SAT and All Other Exams by Devine and Kylen ($3.95)

CLIFF NOTES, INC.
P.O. Box 80728
Lincoln, NE 68501
Phone 402-477-6971
Hot Line 800-228-4078

Cliffs PSAT Preparation Guide by Jerry Bobrow and William A. Covino ($3.25)

Cliffs SAT Preparation Guide by J. Bobrow and Wm. Covino ($4.95) - 20%-40% on questioning

Cliffs ACT Preparation Guide by Bobrow, Covino, Kay, Fisher, and Nathan ($4.95)

Soft cover 5x8 manuals written for students preparing for college admissions tests. Each manual focuses on six major areas: the ability tested, the basic skills necessary, understanding directions, analysis of directions, suggested approaches with samples and practice-review analysis. These major areas include valuable terminology, formulas, lists, tables and charts to assist the student in specific areas.

"Be Prepared for the SAT (and PSAT)"	**$430**	**$325 (video tape)**
"Be Prepared for the ACT"	**$430**	**$325 (video tape)**

16 mm 30 minute films available from Churchill Film (662 North Robertson Blvd. Los Angeles, CA 90069 213-657-5110) produced to acquaint students with all the question types found on the SAT/PSAT and ACT tests, to introduce and explain many test-taking strategies, and to help motivate students to prepare independently for these important examinations.

Teacher's Manual For ACT Preparation by Bobrow and Orton (free)
Teacher's Manual For SAT and PSAT Preparation by Bobrow and Orton (free)

A teacher's manual for use with the Cliffs Test Preparation Guides and the 16mm a films." Provides an outline for workshops, classroom sessions, and assigned studies.

CONTEMPORARY BOOKS, INC.
180 North Michigan Ave.
Chicago, Illinois 60601

Preparation for ACT Assessment American College Testing Program by Contemporary Books

This book presents the college applicant with suggestions of things to consider in selecting colleges and information on how to arrange to take the ACT ans what to expect during and after the exams. The book follows the format and content of the ACT assessment and is programmed with step-by-step directions, tests, and correct answers. There are review sections for both English and mathematics skills. ($5.95)

Scholastic Aptitude Test (SAT) by Gary R. Gruber

This book contains four complete SAT tests with explanatory answers, a complete description of all the verbal subtests of the SAT with strategies to use with each question type, a section on developing vocabulary skills, seven diagnostic math tests and refresher sections with special math techniques and shortcuts (developed to be a 15-day Self-Instruction Course). ($6.95)

HARCOURT BRACE JAVANOVICH, PUBLISHERS
757 Third Avenue
New York, New York 10017

How to Prepare for the American College Testing Progrem (ACT)
by Irvin W. Katz

A complete guide to preparing for the ACT, with test-taking tips and review sections on English usage, mathematics, social studies, and natural sciences. ($6.95)

How to Prepare for the SAT by Morton Selub and Doris Selub.

A complete guide to preparing for the SAT, with four full-length examinations with explanations of answers; practice for every type of questions (analogies, sentence completion, reading comprehension, antonyms, mathematical reasoning, quantitative comparison graphs and tables); and strategy and analysis for all sections of the test. ($6.95)

Verbal Review and Workbook for the SAT by John W. Ambey and Robert S. Boone

This book includes practice tests, word lists, information charts, and test-taking strategies. Each Reading and Vocabulary Unit (20 units) includes a vocabulary matching exercise, a reading selection with accompanying questions, a sentence completion exercise, antonym questions, questions on word relationships (analogies), and a root word-vocabulary building exercise. ($5.95)

MULTI-DIMENSIONAL COMMUNICATIONS, INC.
7 Delane Drive
Bedford Hills, New York

Scoring High on College Entrance Examinations is a self-contained, audio-cassette-workbook program which can be used by an individual studying alone, small groups and large formal classes. The narrator on the tape serves as the student's personal tutor, explaining the philosophy of aptitude tests, helping student isolate strengths and weaknesses and guiding the listener through the various drills, exercises, and suggestions found in the workbook. What colleges look for in prospective, candidates for admissions is also discussed. Helpful in preparing for the PSAT, SAT, and ACT tests.

Basic Kit: 1 workbook, 3 cassettes, 1 answer sheet $39.95
Deluxe Kit: 12 workbooks, 3 cassettes, 100 answer sheets $115.00

NEW AMERICAN LIBRARY
1633 Broadway
New York, New York 10019

How to Take the SAT by Marcia Lawrence

This manual provides specific techniques to use in taking the SAT, including: how to recognize clues to answers; a step-by-step approach to answers; building vocabulary skills and written English skills; techniques for fast and accurate reading comprehension; a complete math review and techniques for solving problems; how to use the scoring system, and all the rules and regulations for taking the test. ($5.95)

Computer Preparation Programs

Since 1980 there has been a considerable increase in the number of computer programs available to assist students in their preparation for admissions tests, in particular the SAT exam. A comprehensive article in the October 1982 issue of Personal Computing, entitled "SAT Tutoring Programs: Give Them an Incomplete" by Tom Cullen, describe the growth of interest in this area. After looking at the results of the use of computer programs in preparation for admissions tests, the author concludes that there is some evidence that commercial computer programs help improve standardized test scores, but that researchers are not sure of the reasons for this improvement. In addition the author comments that there are researchers who claim that regular drill-and-test teaching (non-computer) achieves the same results as the computer programs.

Following is a brief description of some of the computer programs available on the market. These descriptions are only informative and not evaluative. The fact that they are listed does not indicate an endorsement by the State Department. Due to the expense of purchase it is advisable for any school interested in this approach to view the programs before any decisions are made to purchase them. Perhaps the best way to review computer programs is to find a school that is currently using computers in their test preparation programs, and ask to be given the opportunity to review the programs. This approach also provides an opportunity to find out how effective the programs have been in that particular school. Sometimes it is possible to find reviews of SAT/ACT computer programs in computer magazines. Occasionally publishers of computer programs will permit school people to review programs before purchase. School personnel should be very cautious about any claims made by these publishers about the effectiveness of their programs.

ACADEMIC HALLMARK
P.O Box 998
Durango, CO 81301
Ph. 303-247-8738

Provide computer software for the Apple computer covering a range of topics: American History, World History, geography, literature, English (vocabulary development and grammar), math (general math, geometry, word problems), physical science (physics, chemistry), earth science (astronomy, geology, meterology), biology, and health.
Average cost of discs ($27.00)

BORG WARNER EDUCATION SYSTEMS
600 West University Drive
Arlington Heights, IL 66604
Ph. 312-394-1010

The Micro Systm 80 College Entrance Examination Preparation series (CEEP) provides students with individualized instruction and practice to help them prepare for the Scholastic Aptitude Test (SAT) and other standardized achievement and aptitude tests.

CEEP contains a total of 56 instructional modules on 12 disks, organized according to the SAT's major test categories. The test questions in these modules are presented in a sequence of instruction that includes the use of two and sometimes all three of the following modes:

- The Test Mode - Simulates test conditions and provides an overall evaluation of student performance. Scoring includes speed of response as well as correctness. This mode also itemizes questions requireing additional study.
- The Lesson Mode - Includes helpful hints and explanations of questions as well as simple "right" and "wrong" reinforcement of student response.
- The Information Mode - Provides the student with exhaustive background information on correct responses as well as information about the distractors used in the questions presented.

CORONADO PUBLISHERS, INC.
(subsidiary of Harcourt Brace Jovanovich, Inc.)
1250 Sixth Ave.
San Diego, CA 92101 (714-230-8280)
Colorado respresentative 452-2494

Computer SAT

Computer Software for the Apple computer (16 disks) diagnoses strengths and weaknesses in 15 key areas, scores and times performance and calculates College Board equivalent scores. 560 drill items and 1000 electronic vocabulary flash cards provide practice on SAT items. User manual provides simple instructions for step-by-step operation of computer SAT program.

A textbook How to Prepare for the SAT contains reveiw of verbal and math categories, strategies for answering questions, and four full-length exams.

Cost: $395.00 (non-computer Kit with a Verbal Review and Workbook for the SAT and an eight-page Student Guide and Record Book is available for $139.50).

KRELL SOFTWARE CORP.
1320 Stoney Brook Road
Stoney Brook, N.Y. 11790 (516-751-5139)

The Krell College Board SAT

Available for the Apple, Atari, Commodore, CP/M, IBM and Radio Shack computers, this program is designed to prepare students for the type of questions they will encounter on the SAT and PSAT exams (verbal and mathematical skills), including the Test of Standard Written English. All questions are posed in multiple choice form and

correspond to the traditional SAT format. Program includes diagnostic analysis of skills, prescription of individual study plans, drill and practice, and simulated exam questions.
Cost: $299.95

Optional features include a workshop generator (49.95), a classroom record management and analysis system (199.95), vocabulary building and dictionary package (149.95), and comprehensive instructional package ($1695.00,

MICRO LAB LEARNING CENTER
2310 Skokie Valley Road
Highland Park, Illinois (312-433-7550)

English SAT tutorial I

This computer disc for the Apple computer provides instruction on the verbal portion of the SAT and covers skills of vocabulary, reasoning and interpretive ability. The student using the program is presented with verbal questions from the SAT and then given further explanation of a correct response or reasons why an incorrect response is wrong.

RSA PUBLISHERS
1002 - 5th Street
Greeley, CO 80631 (356-9800)

SAT Verbal Skills Improvement Programs

A series of 32 programs for SAT preparation available for the Apple and Commo dore Pet Computers (5 programs are available for the TRS-80 cassette). The format of the excersises has been constructed to be similar to the actual SAT examination so that students learn the material and practice test-taking skills. The following areas are covered:

Etymology
Foreign words and phrases
Word Categories
Word Relationships
Number Series
Synonyms
Antonyms
Definitions
Vocabulary Building
Analogies

Cost: Variable $13-$70 per program.

Publications On General Subjects of Testing and Admissions

Feder, Bernard. **The Complete Guide to Taking Tests.** Englewood Cliffs, New Jersey: Prentice Hall, 1979.

The author treats test taking as a major survival skill and provides the reader with information on the most effective way to study for tests and exams. He covers the general strategies of test-taking and then focuses on particular types of tests--classroom objectives tests, standardized tests, writing ability tests, and essay examinations.

Hayden, Thomas C. **Handbook of College Admissions.** New York: Antheneum, 1981.

From experiences as Director of College Placement at Phillips Exeter Academy, the author describes how to visit colleges, handle interviews, and fill out applications. He instructs the applicant on developing the edge that will make his or her application stand out in the group.

Miller, James P., editor. **The Testing of Black Students.** published for the American Educational Research Association. Englewood Cliffs, New Jersey: Prentice-Hall, 1974.

A collection of ten articles that deal with the critical issues regarding the effect of educational and psychological testing on the education of minority children in America. Although the topic primarily concerns black students, the issues discussed (test bias, predicting and measuring school achievement, and psychometric barriers to higher education) are equally valid for all minority populations.

Paul, Walter, and Millman, John. **How to Take Tests.** New York: McGraw-Hill, 1969.

These authors discuss the principles of taking any examination covering in-depth strategies such as using time wisely, reading directions and questions carefully, and using good resourcing techniques. There are also chapters in the book that focus on particular types of tests: sentence completions, verbal analogies, vocabulary, reading comprehension, essay and mathematics.

Stenio, Andrew J. **The Testing Trap.** New York: Rawson Wode Publishers, Inc., 1981.

This book discusses how tests, which "measure" everything from intelligence to aptitude, effect the lives of parents and children. Stenio demonstrates how to protect children from being branded as less than capable and how to build on the tests strength and compensate for their weaknesses, and suggests changes to make tests fairer and more accurate.

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- campus visitation
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IX. RESEARCH ON THE EFFECTS OF PREPARING FOR COLLEGE ADMISSIONS TESTS

IX. RESEARCH ON THE EFFECTS OF PREPARING FOR COLLEGE ADMISSIONS TESTS

During the past few years there has been a considerable amount written on the impact of coaching and preparation on college admission test scores. Almost all the studies conducted indicate that coaching of a student by a competent teacher or careful preparation by the student several weeks prior to the actual admissions test date can result in an increase in test scores. The major differences in the research are over how much the scores can be increased and how much coaching or preparation is necessary to make a significant increase in scores.

There are researchers who claim that final preparations or reviews make very little difference in test scores, and that a student's achievement on tests is based primarily on how well he or she is prepared as a result of taking high school courses in areas covered by the tests and as a result of intellectual activity outside the classroom. Presenting the other side of the issue, there are researchers who attest that their work, as well as the research of others, show that well-organized coaching by competent teachers can result in a significant increase on either the verbal or mathematical sections of an admissions test

Below are brief descriptions of some of the major studies on effects of coaching and preparation. These studies do not cover all the research that has been done; however, they do cover the major arguments and evidence dealing with the subject of how much difference coaching or preparation can make. These studies also refer to or have bibliographies that cover almost all the research that has been conducted on the subject.

It is interesting to note that almost all the research on coaching has been focused on the SAT. It appears that there are two major reasons for this. The SAT is used as one of ther requirements for admissions to a number of universities where there is a great deal of competition for a limited number of openings. Parents and schools interested in preparing their students for this competition have organized and sought out coaching programs and materials to assist with a review of the SAT materials. The SAT has also become a barometer for measuring the overall achievement of high school students in the United States. Comparisons of SAT scores from year to year have been used by many writers as indicators of the quality of the educational system as a whole. Although the ACT is used with large numbers of students and covers areas similar to those on the SAT, it has received far less publicity in terms of changes in scores over time.

Alderman, D.L. and Powers, D.E. "The Effects of Special Preparation on SAt-Verbal Scores." American Educationa Research Journal, **1980, 17:239-253.** An examination of the effectiveness of eight secondary school programs specifically designed to improve student performance on the SAT-Verbal component. Findings of the researchers indicated that the programs devised and implemented for the explicit purpose of improving student scores had little influence on actual test performance.

Anastasi, Anne. "Coaching, Test Sophistication, and Developed Abilities." American Psychologist, Volume 36, Number 10, 1981, 36:1086-1093. The author indicates that efforts to measure the effectiveness of coaching are characterized by confusion and controversy due to misconceptions about the nature of tests, the range of activities covered by the term coaching, and methodological problems in the studies. The author defines and distinguishes among the varieties of tests and coaching approaches as well as different methodologies of coaching research.

Federal Trade Commission, Bureau of Consumer Protection. "Effects of Coaching on Standardized Admission Examinations." Revised statistical analysis of data gathered by Boston Regional Office of the Federal Trade Commission. Washington, D.C.: Author, 1979. A report of the findings of the Bureau of Consumer Protections in Boston regarding the effectiveness of two commercial coaching schools that offered preparation courses for the SAT. The researchers concluded that one of the two schools was effective in raising student scores significantly (25 points on both the verbal and mathematics sections of the SAT.) No effects of improved performance were found for the second coaching school. The report reviews other research on the subject of coaching and discuss the importance of coaching issues, including differences in parental incomes and schools attended by coached and uncoached students.

Jackson, R. "The Scholastic Aptitude Test: a response to Slack and Porter's Critical Appraisal." Harvard Educational Review, 1980, 50:382-391. The author questions Slack and Porter's descriptions of the nature of the SAT and their definitions of coaching. The author cites Slack and Porter for a failure to distinguish between short and long-term instruction for the SAT and the omission of important studies and descriptive literature.

Messick, S., in collaboration with Alderman, D.L., Angoff, W., Jungeblut, A., Powers, D.E., Roch, D., Rubin, D.B., and Stroud, T.W.F. The Effectiveness of Coaching for the S.A.T.: Review and Reanalysis of Research from Fifties to the FTC. Princeton: Educational Testing Service, 1980. This report presents a critique and reanalysis of the Federal Trade Commission's (FTC) study of commercial coaching for the Scholastic Aptitude Test (ACT). The first part of the report summarizes the major results of earlier studies in a way that draws special attention to the strengths and limitations of various study designs. After reviewing earlier studies and the FTC study, the report considers the implications of the findings for testing practice and policy. The author reaches the conclusion that the improvement of comprehension and reasoning skills measured by the SAT is a function of time and effort expended. Furthermore, each additional increase in ability may require increasing amounts of time and effort, probably geometrically increasing amounts since the time required to achieve average score increases greater than 20 to 30 points especially in Verbal, may rapidly approach that of full-time schooling. According to the author the soundest long-range mode of preparation for the SAT would appear to be a secondary-school program emphasizing the development of thought as well as knowledge.

National Education Association. Measurement and Testing: An NEA Perspective. 1980. This 97-page report is an interesting combination of historical background, sound analysis of research data, and the Association's position to various testing issues. Those who want the facts will focus their reading upon section two which discusses the issue of SAT coachability.

Pike, L.W. "Short-term Instruction, Testwiseness, and the Scholastic Aptitude Test: A Literature Review with Research Recommendations." (RS 78-2). Princeton: Educational Testing Service, 1978. A review of the research literature on short term instruction and intermediate team instruction for the SAT-mathematical sections and SAT-verbal sections. The studies were reviewed and interpreted within the framework of a score components model, test taking confidence, efficiency, examinee item, and instructional characteristics. Results recognized meaningful short term instruction effects for the SAT-m and unresolved results for the SAT-v.

Slack, W.V., and Porter, D. "The Scholastic Aptitude Test: A Critical Appraisal." Harvard Educational Review, 1980, 50:154-175. The authors analyze the results of a number of studies conducted by ETS and the College Board and question the conclusions by ETS and the College Board that coaching has little effect on scores. The authors argue that there is ample evidence that students can improve their scores, particularly if the materials are well prepared and a part of the school curriculum. The authors also question the relevance of the SAT as prediction of college success.

Slack, W.V., and Porter, D. "Training, Validity, and the Issue of Aptitude: A Reply to Jackson." Harvard Educational Review, August, 1980, 50: 392-401. A reply to Jackson's criticism of their original articles, "The Scholastic Aptitude Test: A Critical Appraisal." The authors concern is that by omitting responses to studies that showed substantial gains as a result of coaching, that ETS and the College Board have misled students and counselors.

The College Board, "Taking the SAT." published 1982. Summarizes the College Board position with respect to preparation for the SAT. It concludes that generally the soundest preparation for the SAT is to study widely with emphasis on academic courses and extensive outside reading.

REVIEW COMMITTEE FOR SOURCEBOOK ON PREPARATION FOR COLLEGE ADMISSIONS TESTS

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ACCOUNTABILITY AND ACCREDITATION

Implement district accountability and accreditation programs at the building level. Emphasis will be given to increasing public involvement, district evaluation of educational programs and student competency, reporting to the public, development of long-range plans by schools and school districts, and to strengthening the leadership effectiveness of the school principal.

ALLIANCES FOR PUBLIC EDUCATION

Increase the involvement of education with business, the community, and parents. Emphasis will be given to developing effective school-business-community relationships to promote school-community interaction, and maintaining dialogue between the State Board of Education, the Colorado Commission on Higher Education, the State Board for Community Colleges and Occupational Education, and other state educational organizations.

EDUCATIONAL LEADERSHIP

Implement activities to strengthen the leadership role of local school districts. Provide information and assistance to districts on technological advances, programs for gifted and talented students, and maintenance of efforts to be cost efficient and cost effective.

TEACHER EDUCATION

Implement the new state program for testing the basic skills of teachers seeking Colorado certification. Develop programs to assist in the recruitment and preparation of teachers to serve rural schools. Determine which curricular areas will face teacher shortages and formulate plans to improve opportunities in those subject areas.

STUDENT RESPONSIBILITY AND CITIZENSHIP

Develop opportunities for students to learn about their government and their responsibilities and opportunities as citizens. Implement district policies and programs which emphasize respect for one's self and others.

STATEWIDE LIBRARY NETWORK

Implement a statewide library network, utilizing modern technology, by the provision o technical expertise to existing Library Services and Construction Act automation projects and assistance to all Colorado libraries regarding their role in the Colorado library network.

Adopted by the Colorado State Board of Education on July 8, 1982.

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